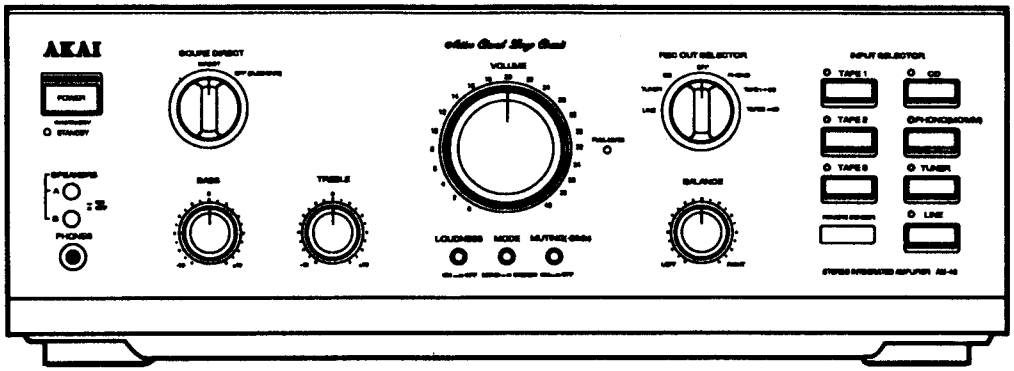
AKAI SERVICE MANUAL



MODEL AM-49

STEREO INTEGRATED AMPLIFIER

MODEL AM-39, 49

SPECIFICATIONS

Power output	
AM-49	140 W + 140 W (DIN, 4 ohms at 1 kHz, 1% distortion)
	80 W + 80 W (FTC, 8 ohms at 30 Hz to 20 kHz, 0.05 % distortion)
AM-39	100W + 100 W (DIN, 4 ohms at 1 kHz, 1% distortion)
	60 W + 60 W (FTC, 8 ohms at 30 Hz to 20 kHz, 0.05 % distortion)
Power band width	
AM-49	5 Hz to 60 kHz / 0.1 % distortion
AM-39	10 Hz to 60 kHz / 0.1% distortion
Total harmonic distortion	0.005 % (1 kHz, 8 ohms)
Frequency responce	5 Hz to 100 kHz (+0 dB, – 3 dB)
Tone control	
Bass	± 10 dB (100 Hz)
Treble	± 10 dB (10 kHz)
Input sensitivity/Impedance	
Phono (MM)	2.0 mV / 47 kohms
Phono (MC)	200 µV / 100 ohms
Tuner, CD, Tape.	150 mV / 47 kohms
Maximum input level	
Phono (MM)	150 mV
Tuner, CD, Tape.	9 V (at tone control flat)
Damping factor	48 (1 kHz, 8 ohms)
Residual noise	0.1 mV (IEC-A)

S / N ratio	
Phono (MM)	85 dB (IEC-A)
Phono (MC)	71 dB (IEC-A)
Tuner, CD, Tape	101 dB (IEC-A)
Audio mute	– 20 dB
Full mute	– 70 dB
Channel separation	65 dB (1 kHz) / 55 dB (10 kHz)
Cross talk	
CD to Phono	90 dB (1kHz, 500 mV Input level)
CD to Tuner/Tape	90 dB (1kHz, 500 mV Input level)
Required speaker impedance	
A or B	4 to 16 ohms
A and B	8 to 16 ohms
Power requirements	220-230 V, 50 Hz for Europe except U.K.
	240 V, 50 Hz for U.K.
Power consumption	
AM-49	210 W
AM-39	170 W
Dimensions	425 (W) x 156 (H) x 370 (D) mm
Weight	
AM-49	10.9 kg
AM-39	10.2 kg

Standard accessory

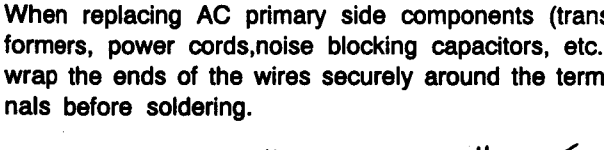
Remote control unit	1
Batteries for remote control	2
Operator's manual	1

* For improvement purposes, specifications and design are subject to change without notice.

★SAEETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts indentified by the ⚠ (*) symbol are critical for safety. Replace them only with the parts number specified
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation.
   These must also be replaced only with specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (Insulating Barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing micro switch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords,noise blocking capacitors, etc.), wrap the ends of the wires securely around the terminals before soldering.



6. Make sure that wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.
The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphonejacks, signal-input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15 µF capacitor, under the unit's normal working conditions. The leakage-current should be less than 0.5 mA rms AC.
The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 M ohms.

MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as small accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can.
Please leave them at an appropriate depot.

★INFORMATION

SYMBOLS FOR PRIMARY DESTINATION

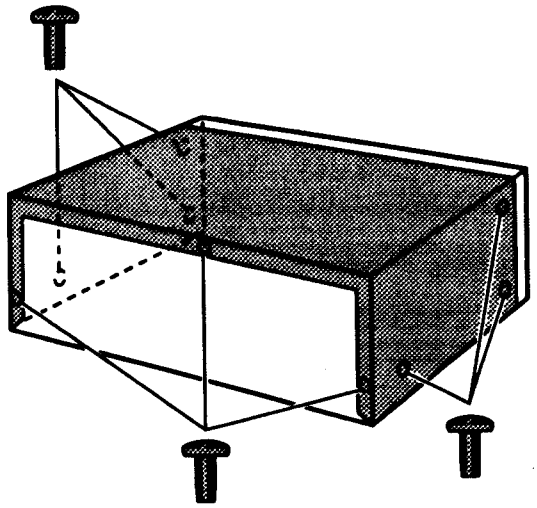
Alphabet indicates the destination of the units as listed below.

Symbols	Principal Destinations
A	U.S.A
B	U.K.
C	Canada
E	Europe (except UK)
J	Japan
S	Australia
V	Germany
U	Universal Area
Y*	Custom version

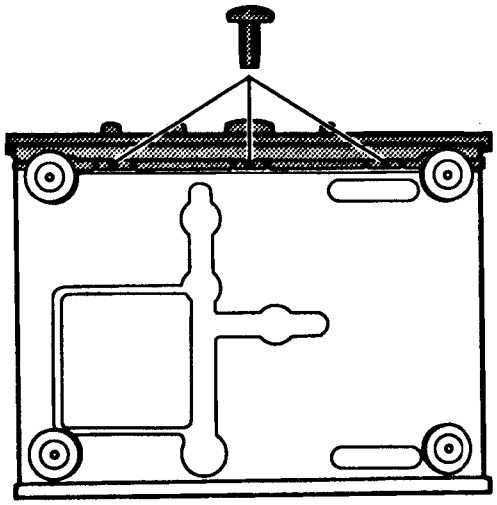
I. DISASSEMBLY

In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations.
Reassemble in the reverse order.

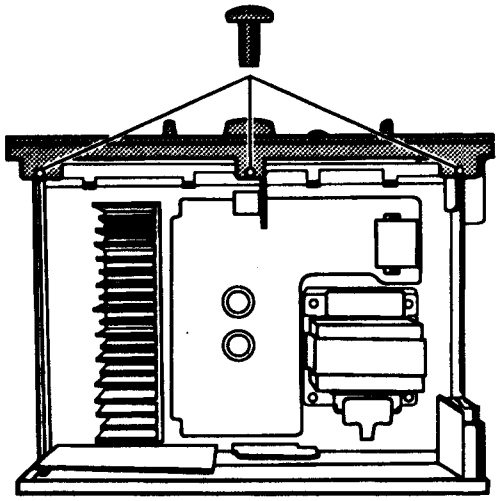
1. Removal of UPPER COVER



2. Removal of FRONT PANEL



Remove the six knobs by pulling them out.



II. PRINCIPAL PARTS LOCATION

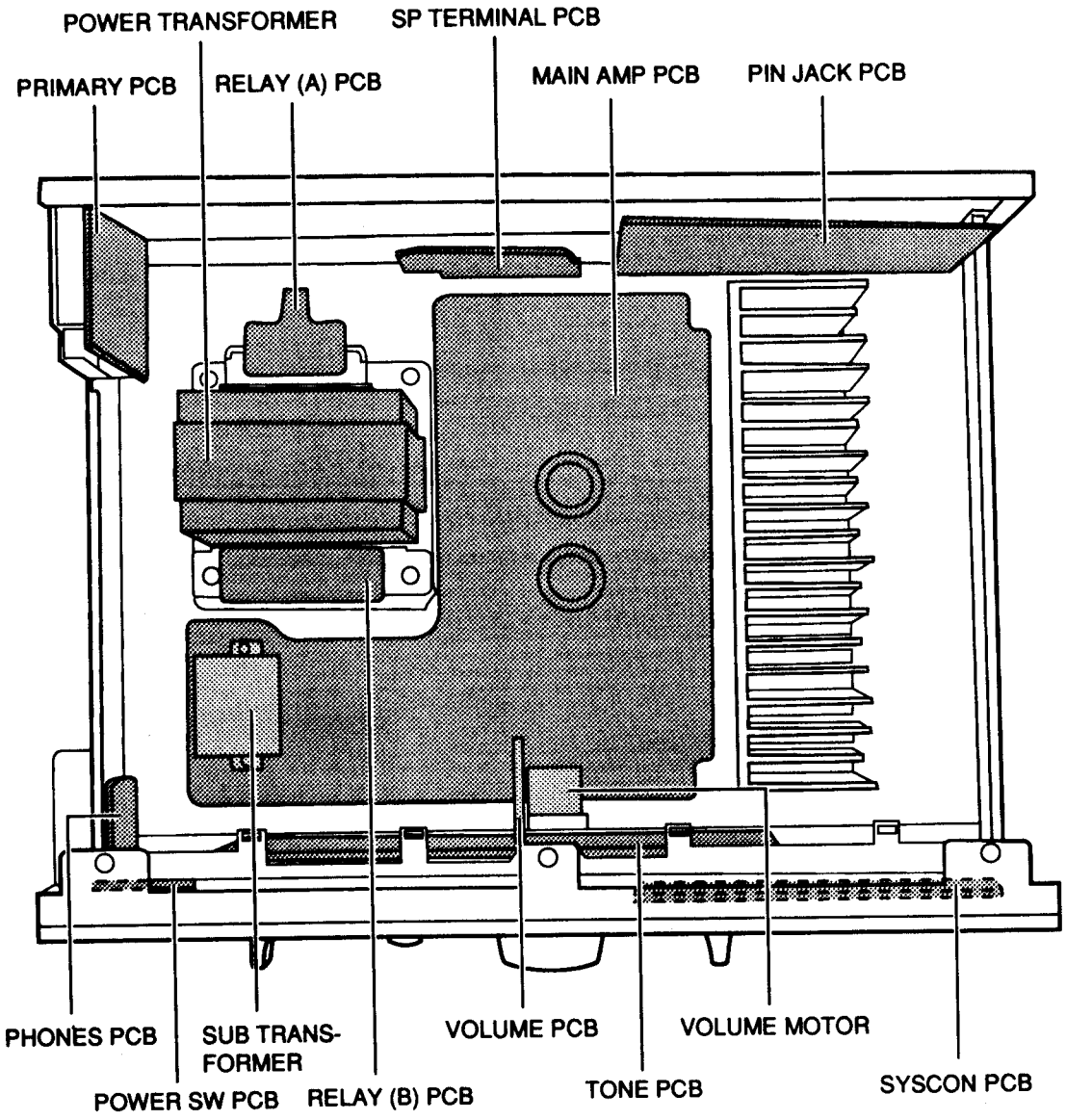


Fig.2-1

III. PARTS LIST

[redacted]

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] :AAL (U.S.A) [S] :SAA (Australia)
[B] :BEAB (England) [U] :U/T (Universal Area)
[C] :CSA (Canada)
[E] :CEE (Europe) [V] :VDE (Germany)
[J] :JPN (Japan) [Y] :Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No.listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref. No.	Part No.	Description
1	AX-415040M	REMOCON RC-S49 [AM-39]
2	AX-415115M	REMOCON RC-S59 [AM-49]
3	*BT-415038M	TRANS POW A1030S-BS [B]
4	*BT-415037M	TRANS POW A1030S-EV [E]
5	*BT-415111M	TRANS POW A2075-BS [AM-39][T901]
6	*BT-415110M	TRANS POW A2075-EV [AM-39][T901]
7	*BT-415114M	TRANS POW A2076-BS [AM-49][T901]
8	*BT-415112M	TRANS POW A2076-EV [AM-49][T901]
9	*EC-368118	C DBL LAYER EECS5R5H 224 5.5DC
10	EC-364978	C EC V CUT SME 102M 16.0DC
11	EC-373373	C EC V CUT 822M 56.0DC [AM-49]
12	EC-390066J	C EC V S10 682M 50.0DC [AM-39]
13	ED-403436J	D LED SLR-33VCF03 RED T05
14	ED-415085J	D LED SLR-33VC3F RED
15	ED-383034J	D LED SLR-54PC3F L,M GREEN
16	ED-400680J	D LED SLR33MCF3 GREEN T05
17	ED-403987J	D LED SLR33MC3F GREEN
18	ED-301911	D SILICON H DS448
19	ED-307572	D SILICON H 1SS131
20	ED-624903	D SILICON H 1S2473
21	*ED-384278J	D SILICON RBV602 200/6.0A
22	*ED-511907	D SILICON 1N4002 100/1.0A
23	*ED-319176	D ZENER H HZ12 A3
24	*ED-343421	D ZENER H HZ16-2L
25	ED-330219	D ZENER H HZ20-2L
26	*ED-346529	D ZENER H HZ6C2L
27	*EF-415060J	FUSE S504 T 250V 630MA
28	*EF-415061J	FUSE S506 T 250V 2.50A [AM-39]
29	*EF-415062J	FUSE S506 T 250V 3.15A [AM-49]
30	EI-416800J	IC LC66404A-4B67 A2075-1
31	EI-403530J	IC LC7822N
32	*EI-393323J	IC M5218AL-771
33	EI-393326J	IC M5218AP-721
34	EI-382875J	OSC CE CST4.00MGW 4MHZ
35	*EJ-415050J	SOCKET OUT M1882 3P [E]
36	*EQ-415055J	RELAY POW VS-6MB 1NO 6V
37	EQ-403529J1	RELAY POW 12S MBU524UL3 2NO12V
38	EQ-400957J	RELAY SIG RY12W-OH-K 2TR 12V
39	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G
40	*ER-344161	R FUSE H S10 ERD2FC 1/4W 82R0G
41	ES-415119J	SW PUSH SPEC21 2THROW * [AM-39]
42	ES-415120J	SW PUSH SPEC31 3THROW * [AM-49]
43	ES-415087J	SW PUSH SPUL21 2THROW N
44	ES-415126J	SW ROTARY SRBV17 01-07N
45	ES-415099J	SW ROTARY SRBV22 02-02N
46	ES-415123J	SW SLIDE SSSU04 2-04-02S
47	ES-415046J	SW TACT SOR-132HS T05 [AM-49]
48	ET-403432J	DETECTOR SPS-420-1
49	ET-369248	TR DTA114YS
50	ET-353897	TR DTC114ES
51	ET-354365	TR DTC114YS
52	ET-322353	TR FET 2SK117 Y
53	ET-360749	TR FET 2SK170 BL
54	*ET-415051J	TR 2SA1186 P,Y LF118 [AM-39]
55	ET-368048	TR 2SA1208 S [AM-49]
56	*ET-345626	TR 2SA1248 S,T
57	*ET-415052J	TR 2SA1303 P,Y LF118 [AM-49]
58	ET-353899	TR 2SA1317 S,T,U
59	*ET-352726	TR 2SA1392 T,U
60	ET-305463	TR 2SA970 GR,BL [AM-39]
61	ET-307195	TR 2SC2240 GR,BL
62	*ET-415053J	TR 2SC2837 P,Y LF118 [AM-39]
63	ET-368047	TR 2SC2910 S [AM-49]
64	*ET-345625	TR 2SC3116 S,T
65	*ET-415056J	TR 2SC3284 P,Y LF118 [AM-49]
66	ET-397160J	TR 2SC3330 R,S,T,U,V
67	*ET-378524J	TR 2SC3383 S,T,U
68	ET-394735J	TR 2SC3792 T05
69	*ET-376880	TR 2SD1266 P

2. P.C BOARD BLOCK

Ref. No.	Part No.	Description
1-A	BA-A1030T020F	ML PC (#) MAIN BLK AM-39 (E)/ML
1-B	BA-A1030T020G	ML PC (#) MAIN BLK AM-39 (B)/ML
1-C	BA-A1030T020H	ML PC (#) MAIN BLK AM-49 (E)/ML
1-D	BA-A1030T020J	ML PC (#) MAIN BLK AM-49 (B)/ML
2-A	BA-A2075T030A	ML PC (#) PRE-SYSBLK AM-39 (E)/ML
2-B	BA-A2075T030B	ML PC (#) PRE-SYSBLK AM-39 (B)/ML
2-C	BA-A2075T030C	ML PC (#) PRE-SYSBLK AM-49 (E)/ML
2-D	BA-A2075T030D	ML PC (#) PRE-SYSBLK AM-49 (B)/ML

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARDS.
- MAIN AMP P.C BOARD
- PRIMARY P.C BOARD
- SP TERMINAL P.C BOARD
- PHONES P.C BOARD

PC (#) PRE-SYS BLK CONSISTS OF FOLLOWING P.C BOARDS.
- PIN JACK P.C BOARD
- TONE P.C BOARD
- VOLUME P.C BOARD
- SYSCON P.C BOARD
- POWER SW P.C BOARD

3. MAIN AMP P.C BOARD

Ref. No.	Part No.	Description
C150-A	EC-390066J	C EC V S10 682M 50.0DC [AM-39]
C150-B	EC-373373	C EC V CUT 822M 56.0DC [AM-49]
C151-A	EC-390066J	C EC V S10 682M 50.0DC [AM-39]
C151-B	EC-373373	C EC V CUT 822M 56.0DC [AM-49]
C159	EC-364978	C EC V CUT SME 102M 16.0DC
D103	ED-301911	D SILICON H DS448
D104	ED-301911	D SILICON H DS448
D105	*ED-301911	D SILICON H DS448
D106	ED-307572	D SILICON H 1SS131
D107	ED-307572	D SILICON H 1SS131
D108	ED-624903	D SILICON H 1S2473
D109	ED-307572	D SILICON H 1SS131
D110	ED-307572	D SILICON H 1SS131
D111	ED-624903	D SILICON H 1S2473
D112	ED-330219	D ZENER H HZ20-2L
D150	*ED-384278J	D SILICON RBV602 200/6.0A
D151	*ED-511907	D SILICON 1N4002 100/1.0A
D152	*ED-511907	D SILICON 1N4002 100/1.0A
D153	*ED-511907	D SILICON 1N4002 100/1.0A
D154	*ED-511907	D SILICON 1N4002 100/1.0A
D155	ED-301911	D SILICON H DS448
D156	ED-301911	D SILICON H DS448
D157	ED-301911	D SILICON H DS448

Ref. No.	Part No.	Description
D158	ED-301911	D SILICON H DS448
D159	*ED-343421	D ZENER H HZ16-2L
D160	*ED-343421	D ZENER H HZ16-2L
D161	*ED-511907	D SILICON 1N4002 100/1.0A
D162	*ED-511907	D SILICON 1N4002 100/1.0A
D163	*ED-511907	D SILICON 1N4002 100/1.0A
D164	*ED-511907	D SILICON 1N4002 100/1.0A
D165	ED-301911	D SILICON H DS448
D166	ED-301911	D SILICON H DS448
D167	*ED-346529	D ZENER H HZ6C2L
D170	ED-383034J	D LED SLR-54PC3F L,M GREEN
D203	ED-301911	D SILICON H DS448
D204	ED-301911	D SILICON H DS448
D205	*ED-301911	D SILICON H DS448
D206	ED-307572	D SILICON H 1SS131
D207	ED-307572	D SILICON H 1SS131
D270	ED-383034J	D LED SLR-54PC3F L,M GREEN
FR101	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G
FR102	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G
FR201	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G
FR202	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G
IC101	*EI-393323J	IC M5218AL-771
L101	EO-403613J	COIL FIX 2 202AK-018A 2R2K
L201	EO-403613J	COIL FIX 2 202AK-018A 2R2K
R115	*ER-382613J	R CB H S10FLR RDS 1/4W 331J
R118	*ER-382613J	R CB H S10FLR RDS 1/4W 331J
R120	*ER-382613J	R CB H S10FLR RDS 1/4W 331J
R122	*ER-378514J	R OMF H S12 FS 1W 8R2J
R123	*ER-378514J	R OMF H S12 FS 1W 8R2J
R125	*ER-368284	R OMF H S12 FS 1W 271J
R126	*ER-383007J	R OMF H S12 FS 1W 1R0J
R127	*ER-383007J	R OMF H S12 FS 1W 1R0J
R128	*ER-324480	R CB H S10 FS RDS 1/4W 470J
R129	*ER-324480	R CB H S10 FS RDS 1/4W 470J
R130	*ER-368226	R CT P R33+R33 5W
R131	*ER-333119	R OMF H S20 FS 2W 560J
R132	*ER-411836J	R OMF H S15 FS 2W 1R0J
R166	*ER-378833J	R CB H S10FLR RDS 1/4W 220J
R169	*ER-378833J	R CB H S10FLR RDS 1/4W 220J
R175	*ER-328069	R CB H S10 FS RDS 1/4W 2R7J
R182	*ER-328069	R CB H S10 FS RDS 1/4W 2R7J
R215	*ER-382613J	R CB H S10FLR RDS 1/4W 331J
R218	*ER-382613J	R CB H S10FLR RDS 1/4W 331J
R220	*ER-382613J	R CB H S10FLR RDS 1/4W 331J
R222	*ER-378514J	R OMF H S12 FS 1W 8R2J
R223	*ER-378514J	R OMF H S12 FS 1W 8R2J
R225	*ER-368284	R OMF H S12 FS 1W 271J
R226	*ER-383007J	R OMF H S12 FS 1W 1R0J
R227	*ER-383007J	R OMF H S12 FS 1W 1R0J
R230	*ER-368226	R CT P R33+R33 5W
R231	*ER-333119	R OMF H S20 FS 2W 560J
R232	*ER-411836J	R OMF H S15 FS 2W 1R0J
RL101	EQ-403529J1	RELAY POW 12S MBU524UL3 2NO12V
T101-A	*BT-415037M	TRANS POW A1030S-EV [E]
T101-B	*BT-415038M	TRANS POW A1030S-BS [B]
TR101	ET-322353	TR FET 2SK117 Y
TR102	ET-307195	TR 2SC2240 GR,BL
TR103	ET-307195	TR 2SC2240 GR,BL
TR104	*ET-307195	TR 2SC2240 GR,BL
TR105-A	ET-305463	TR 2SA970 GR,BL [AM-39]
TR105-B	ET-368048	TR 2SA1208 S [AM-49]
TR106-A	*ET-305463	TR 2SA970 GR,BL [AM-39]
TR106-B	*ET-368048	TR 2SA1208 S [AM-49]
TR107-A	*ET-305463	TR 2SA970 GR,BL [AM-39]
TR107-B	*ET-368048	TR 2SA1208 S [AM-49]
TR108-A	ET-305463	TR 2SA970 GR,BL [AM-39]
TR108-B	ET-368048	TR 2SA1208 S [AM-49]
TR109-A	ET-307195	TR 2SC2240 GR,BL [AM-39]
TR109-B	ET-368047	TR 2SC2910 S [AM-49]
TR110	*ET-378524J	TR 2SC3383 S,T,U
TR111	*ET-378524J	TR 2SC3383 S,T,U
TR112	*ET-352726	TR 2SA1392 T,U
TR113	*ET-345625	TR 2SC3116 S,T
TR114	*ET-345626	TR 2SA1248 S,T
TR115-A	*ET-415053J	TR 2SC2837 P,Y LF118 [AM-39]
TR115-B	*ET-415056J	TR 2SC3284 P,Y LF118 [AM-49]
TR116-A	*ET-415051J	TR 2SA1186 P,Y LF118 [AM-39]
TR116-B	*ET-415052J	TR 2SA1303 P,Y LF118 [AM-49]
TR117	ET-305463	TR 2SA970 GR,BL
TR118	ET-397160J	TR 2SC3330 R,S,T,U,V
TR119	ET-353899	TR 2SA1317 S,T,U
TR120	ET-397160J	TR 2SC3330 R,S,T,U,V
TR121	ET-397160J	TR 2SC3330 R,S,T,U,V
TR122	ET-397160J	TR 2SC3330 R,S,T,U,V
TR123	ET-397160J	TR 2SC3330 R,S,T,U,V
TR150	ET-352726	TR 2SA1392 T,U
TR151	*ET-376880	TR 2SD1266 P
TR152	ET-378524J	TR 2SC3383 S,T,U
TR153	*ET-345626	TR 2SA1248 S,T
TR154	ET-352726	TR 2SA1392 T,U
TR155	*ET-345625	TR 2SC3116 S,T
TR156	ET-397160J	TR 2SC3330 R,S,T,U,V
TR157	*ET-378524J	TR 2SC3383 S,T,U
TR158	*ET-345625	TR 2SC3116 S,T
TR201	ET-322353	TR FET 2SK117 Y
TR202	ET-307195	TR 2SC2240 GR,BL
TR203	ET-307195	TR 2SC2240 GR,BL
TR204	*ET-307195	TR 2SC2240 GR,BL
TR205-A	*ET-305463	TR 2SA970 GR,BL [AM-39]
TR205-B	*ET-368048	TR 2SA1208 S [AM-49]
TR206-A	*ET-305463	TR 2SA970 GR,BL [AM-39]
TR206-B	*ET-368048	TR 2SA1208 S [AM-49]
TR207-A	*ET-305463	TR 2SA970 GR,BL [AM-39]
TR207-B	*ET-368048	TR 2SA1208 S [AM-49]
TR208-A	ET-305463	TR 2SA970 GR,BL [AM-39]
TR208-B	ET-368048	TR 2SA1208 S [AM-49]
TR209-A	ET-307195	TR 2SC2240 GR,BL [AM-39]
TR209-B	ET-368047	TR 2SC2910 S [AM-49]
TR210	*ET-378524J	TR 2SC3383 S,T,U
TR211	*ET-378524J	TR 2SC3383 S,T,U
TR212	*ET-352726	TR 2SA1392 T,U
TR213	*ET-345625	TR 2SC3116 S,T
TR214	*ET-345626	TR 2SA1248 S,T
TR215-A	*ET-415053J	TR 2SC2837 P,Y LF118 [AM-39]
TR215-B	*ET-415056J	TR 2SC3284 P,Y LF118 [AM-49]
TR216-A	*ET-415051J	TR 2SA1186 P,Y LF118 [AM-39]
TR216-B	*ET-415052J	TR 2SA1303 P,Y LF118 [AM-49]
TR217	ET-305463	TR 2SA970 GR,BL
F2	*EF-415060J	FUSE S504 T 250V 630MA
F3	*EF-415060J	FUSE S504 T 250V 630MA

4. PRIMARY P.C BOARD

Ref. No.	Part No.	Description
C301	*EC-338496	C CE V DE7100 FZ 472P 400AC
D301	ED-624903	D SILICON H 1S2473
J302	*EJ-415050J	SOCKET OUT M1882 3P [E]
L301	*EO-403613J	COIL FIX 2 202AK-018A 2R2K
L302	*EO-403613J	COIL FIX 2 202AK-018A 2R2K
RL301	*EQ-415055J	RELAY POW VS-6MB 1NO 6V
F1-A	*EF-415061J	FUSE S506 T 250V 2.50A [AM-39]
F1-B	*EF-415062J	FUSE S506 T 250V 3.15A [AM-49]

5. SP TERMINAL P.C BOARD

Ref. No.	Part No.	Description
TM401	EJ-342935	TERMINAL W/SCREW YKD31-0132P8P

6. PHONES P.C BOARD

Ref. No.	Part No.	Description
J501	EJ-391132J	PHONE J 3P YKB24-5162 GP 6.3
R501	*ER-333108	R OMF H S20 FS 2W 471J
R551	*ER-333108	R OMF H S20 FS 2W 471J
SW501	ES-415087J	SW PUSH SPUL21 2THROW N

7. PIN JACK P.C BOARD

Ref. No.	Part No.	Description
D1	ED-301911	D SILICON H DS448
D2	ED-301911	D SILICON H DS448
FR41	*ER-344161	R FUSE H S10 ERD2FC 1/4W 82R0G
FR42	*ER-344161	R FUSE H S10 ERD2FC 1/4W 82R0G
IC1	EI-393326J	IC M5218AP-721
IC2	EI-403530J	IC LC7822N
IC3	EI-403530J	IC LC7822N
J1	EJ-384270J	PIN J T6227-AACB 2P
J2	EJ-368244	PIN J T6087 6P
J3	EJ-382362J	PIN J T6027-AABB 4P
J4	EJ-382362J	PIN J T6027-AABB 4P
J5	EJ-382362J	PIN J T6027-AABB 4P [AM-49]
SW1	ES-415123J	SW SLIDE SSSU04 2-04-02S
TR1	ET-360749	TR FET 2SK170 BL
TR2	ET-360749	TR FET 2SK170 BL
TR3	ET-394735J	TR 2SC3792 T05
TR4	ET-394735J	TR 2SC3792 T05
TR5	ET-394735J	TR 2SC3792 T05
TR6	ET-394735J	TR 2SC3792 T05
TR7	ET-394735J	TR 2SC3792 T05
TR51	ET-360749	TR FET 2SK170 BL
TR52	ET-360749	TR FET 2SK170 BL
TR53	ET-394735J	TR 2SC3792 T05
TR54	ET-394735J	TR 2SC3792 T05
TR55	ET-394735J	TR 2SC3792 T05
TR56	ET-394735J	TR 2SC3792 T05
TR57	ET-394735J	TR 2SC3792 T05

8. TONE P.C BOARD

Ref. No.	Part No.	Description
D101	*ED-319176	D ZENER H HZ12 A3
D102	ED-624903	D SILICON H 1S2473
IC101	EI-393323J	IC M5218AL-771
IC102	EI-393323J	IC M5218AL-771
RL101	EQ-400957J	RELAY SIG RY12W-OH-K 2TR 12V
SW101-A	ES-415119J	SW PUSH SPEC21 2THROW * [AM-39]
SW101-B	ES-415120J	SW PUSH SPEC31 3THROW * [AM-49]
SW102	ES-415099J	SW ROTARY SRBV22 02-02N
SW103	ES-415126J	SW ROTARY SRBV17 01-07N
TR101	ET-397160J	TR 2SC3330 R,S,T,U,V
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
VR101	EV-401270J	VR ROTARY RK16312 B103X2
VR102	EV-401270J	VR ROTARY RK16312 B103X2
VR103	EV-403534J	VR ROTARY RK1631220 SPL W104

9. VOLUME P.C BOARD

Ref. No.	Part No.	Description
D201	ED-301911	D SILICON H DS448
TR201	ET-353899	TR 2SA1317 S,T,U
TR202	ET-353899	TR 2SA1317 S,T,U
TR203	ET-397160J	TR 2SC3330 R,S,T,U,V
TR204	ET-397160J	TR 2SC3330 R,S,T,U,V
VR201	EV-415032M	VR SPL EUWM HD003 B15 B104X2

10. SYSCON P.C BOARD

Ref. No.	Part No.	Description
C802	*EC-368118	C DBL LAYER EECS5R5H 224 5.5DC
D801	ED-301911	D SILICON H DS448
D802	ED-301911	D SILICON H DS448
D803	ED-624903	D SILICON H 1S2473
D804	ED-403436J	D LED SLR-33VCF03 RED T05
D805	ED-400680J	D LED SLR33MCF3 GREEN T05
D806	ED-400680J	D LED SLR33MCF3 GREEN T05
D807	ED-400680J	D LED SLR33MCF3 GREEN T05
D808	ED-400680J	D LED SLR33MCF3 GREEN T05
D809	ED-400680J	D LED SLR33MCF3 GREEN T05
D810	ED-400680J	D LED SLR33MCF3 GREEN T05
D811	ED-400680J	D LED SLR33MCF3 GREEN T05 [AM-49]
IC801	EI-416800J	IC LC66404A-4B67 A2075-1
PH801	ET-403432J	DETECTOR SPS-420-1
TR801	ET-353897	TR DTC114ES
TR802	ET-354365	TR DTC114YS
TR803	ET-369248	TR DTA114YS
TR804	ET-397160J	TR 2SC3330 R,S,T,U,V
TS801	ES-415046J	SW TACT SOR-132HS T05 [AM-49]
TS802	ES-415046J	SW TACT SOR-132HS T05
TS803	ES-415046J	SW TACT SOR-132HS T05
TS804	ES-415046J	SW TACT SOR-132HS T05
TS805	ES-415046J	SW TACT SOR-132HS T05
TS806	ES-415046J	SW TACT SOR-132HS T05
TS807	ES-415046J	SW TACT SOR-132HS T05
X801	EI-382875J	OSC CE CST4.00MGW 4MHZ

11. POWER SW P.C BOARD

Ref. No.	Part No.	Description
D851	ED-415085J	D LED SLR-33VC3F RED
D852	ED-403987J	D LED SLR33MC3F GREEN
D853	ED-403987J	D LED SLR33MC3F GREEN
TS851	ES-415046J	SW TACT SOR-132HS T05

AKAI

MODEL AM-39
MODEL AM-49

SCHEMATIC DIAGRAMS AND PC BOARDS

TABLE OF CONTENTS

1. CONNECTION DIAGRAM 3
2. MAIN AMP & POWER SCHEMATIC DIAGRAM 4
3. MAIN AMP AND OTHER PC BOARDS 5
4. PRE AMP & SYSCON SCHEMATIC DIAGRAM 6
5. TONE AND OTHER PC BOARDS 7
6. BLOCK DIAGRAM 8
8. INFORMATION OF ICs 9

Use these schematic diagrams and PC boards together with the provided service manual.

J1
T6227-AACB
PHONO
J2
T6087
CD
TUNER
LINE
J3
T6027-AABB
IN
TAPE1
OUT
J4
T6027-AABB
IN
TAPE2
OUT
J5
T6027-AABB
IN
TAPE3
OUT
AM-49 ONLY
PIN JACK PCB
A2075A502A
W18
R
GND
L
WW18
R
GND
L
W19
-16V
GND
GND
+16V
WW19
-16V
GND
GND
+16V
P115
9 FULL MUTE
8 POWER ON/OFF
7 REC SEL
6 VR UP
5 VR DOWN
4 GND
3 GND
2 PROTECT
1 +5.6V
W101
+16V
GND
J101
SBRK3S-5
+16V
GND
REC MUTE
CLK
DATA
CE
W17
WW17
REC MUTE
CLK
DATA
CE
J815
174074-9
FULL MUTE
POWER ON/OFF
REC SEL
VR UP
VR DOWN
GND
GND
PROTECT
+5.6V
J106
SBRK3S-5
3 STAND-BY
2 +5.6V
1 STAND-BY
WW816
W816
GND
STAND-BY
+5V
POWER LED
STAND-BY LED
POWER SW PCB
A2075A502E
SYSCON PCB
A2075A502D
W113 HOT (WHITE)
W114 COLD (RED)
W306
WW113
WW114
220V~230V/50Hz
P301
B2P-3-VH
2 HOT
1 COLD
⚠ E ONLY
240V/50Hz
⚠ B ONLY
PRIMARY PCB
A1030A501B
J302
M1882
AC OUTLET
⚠ E ONLY
W302 HOT (WHITE)
W303 COLD (RED)

C D E F G H

PIN JACK PCB
A2075A502A

W18
R
GND
L

WW18
R
GND
L

W19
−16V
GND
GND
+16V

WW19
−16V
GND
GND
+16V

TONE PCB
A2075A502B

P115
9 FULL MUTE
8 POWER ON/OFF
7 REC SEL
6 VR UP
5 VR DOWN
4 GND
3 GND
2 PROTECT
1 +5.6V

VR DOWN
VR UP
GND
+5.6V

L (CENTER TAP)
L
GND
R (CENTER TAP)
R

W101 +16V GND −16V
W104 +5.6V GND POWER ON/OFF PROTECT
W105 GND +5.6V GND

J101 SBRK3S-5: +16V GND −16V
J104 SBRK4S-5: +5.6V GND POWER ON/OFF PROTECT
J105 SBRK3S-5: GND +5.6V GND
P108 B3B-EH-A: R GND L

W110 L GND R
WW110 L GND R

W109 GND GND GND GND
WW109 GND GND GND GND

W407
E ONLY

REC MUTE
CLK
DATA
CE
W17

WW17

J815
174074-9
9 FULL MUTE
8 POWER ON/OFF
7 REC SEL
6 VR UP
5 VR DOWN
4 GND
3 GND
2 PROTECT
1 +5.6V

W816
GND
STAND-BY
+5V
POWER LED
STAND-BY LED

SYSCON PCB
A2075A502D

MAIN AMP PCB
A1030A501A

J106 SBRK3S-5
3 STAND-BY
2 +5.6V
1 STAND-BY

W113 HOT (WHITE)
W114 COLD (RED)

W306 WW113 WW114

W112 GND
W111 GND
WW112 GND
WW111 GND

RELAY (A) PCB
A1030A 501E

RELAY (B) PCB
A1030A501F

*T901 ⚠

220V~230V/50Hz
240V/50Hz
⚠ E ONLY
⚠ B ONLY

P301
B2P-3-VH
2 HOT
1 COLD

PRIMARY PCB
A1030A501B

J302
M1882

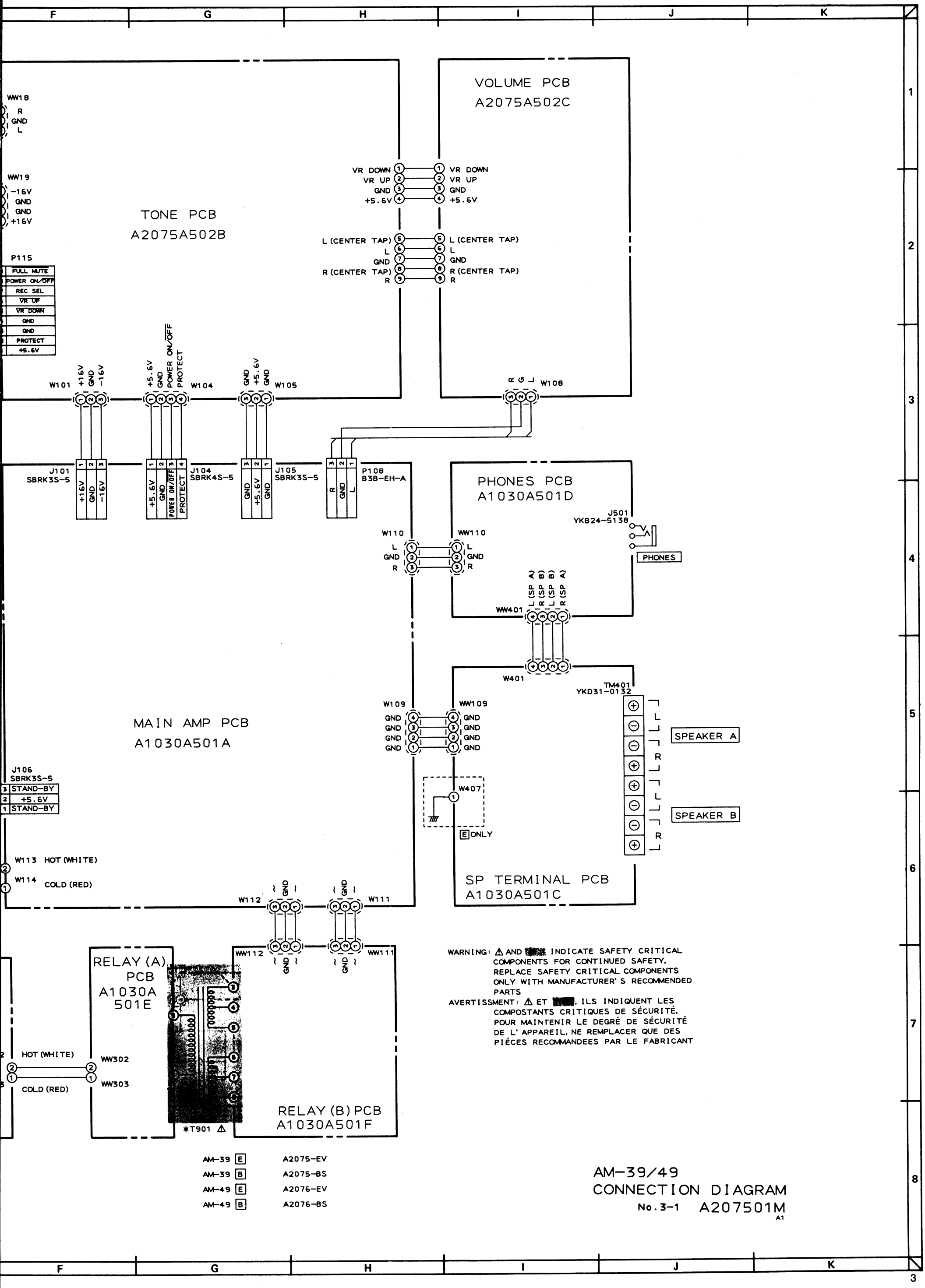
AC OUTLET
⚠ E ONLY

W302 HOT (WHITE) WW302
W303 COLD (RED) WW303

WARNING: ⚠
C
R
O
P
AVERTISSM
C
P
D
P

AM-39 E	A2075-EV
AM-39 B	A2075-BS
AM-49 E	A2076-EV
AM-49 B	A2076-BS

C D E F G H



WARNING: ⚠ AND ▮ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ▮, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

AM-39 E	A2075-EV
AM-39 B	A2075-BS
AM-49 E	A2076-EV
AM-49 B	A2076-BS

AM-39/49
CONNECTION DIAGRAM
No.3-1 A207501M
A1

*DEPENDED ON MODEL. No.

	AM-39	AM-49
C109, 110	10/50	10/63
C150, 151	6800/50	8200/56
R105, 205	47	39
R136, 236, 137, 237	47K	56K
TR105, 205, 106, 206	2SA970 (BL)	2SA1208 (S)
TR107, 207, 108, 208	2SA970 (BL)	2SA1208 (S)
TR109, 209	2SC2240 (GR, BL)	2SC2910 (S)
TR115, 215	2SC2837 (P, Y)	2SC3284 (P, Y)
TR116, 216	2SA1186 (P, Y)	2SA1303 (P, Y)
R113, 213	470	390
F1	T2.5A 250V	T3.15A 250V

INDICATED VOLTAGES WERE MEASURED WHEN NO SIGNAL WAS BEING INPUT. (FUNCTION: CD MODE, MODEL: AM-49)

B (POWER SUPPLY) LINE

L-CH AUDIO SIGNAL LINE

C D E F G H I

PHONES PCB
A1030A501D

SW501
SPUL21
SPEAKER SW
SW501-A
SPEAKER A
SW501-B
SPEAKER B
E ONLY

W110
WW110
YKB24-
C501 0.001
C551 0.001
R501 470
R551 470

C108 2.2/50 16.3V
R134 120K
R133 150K
C107 1/50
R135 22K
IC101 (1/2) M5218AL
-5.7V
0V
R128 47
C109
R142 470K
TR113 2SC3116 (S, T)
TR111 2SC3383 (S, T)
TR115
R122 4W 8.2
R126 1W 1
FR101 1K
R125 1W 270
FR102 1K
R130 5W 0.33+0.33
R124 2.2K
R123 1W 8.2
R127 1W 1
TR114 2SA1248 (S, T)
TR116
R131 2W 56
C105 0.047
C106 0.047
C110
R143 470K
R129
C103 27P
C104 1/50 (FA)
R144 220K
R145 220K
TR106 48.0V 47.3V
TR108
TR109 -1.1V -49.4V
TR110 2SC3383 (S, T)
TR112 2SA1392 (S, T)
JS102

*R136
*R137
TR117 2SA970 (BL)
R140 47K
TR119 2SA1317 (S, T, U)
TR118 2SC3330 (S, T, U)
R150 56K
C111 3.3/50
C115 15P
D106 1SS131
D107 1SS131
R138 150K
R139 150K
D112 HZ20L2
R151 22K
R152 22K
R153 560K
C112 4.7/50
TR120 2SC3330 (S, T, U)
C113 10/16
R154 1M
R155 2.7K
TR121 2SC3330 (S, T, U)
R241 680K
R141 820K
R132 2W 1.0
R232 2W 1.0
L101 2.2
L201 2.2
RL101 12S MBU-524UL3
TR122 2SC3330 (S, T, U)
R157 4.7K
TR123 2SC3330 (S, T, U)
D108 1S2473
R156 6.8K
R158 47
R159 47

*C150
*C151
D150 RBV602
D111 1S2473
R161 680K
C114 3.3/50
D109 1SS131
R160 4.7K
D110 1SS131
R170 18K
R172 10K
R173 10K
R171 18K
D151
F2 T630mA 250V
TR151 2SD1266 (P, Q)
C155 10/50
C156 10/50
R164 82
R166 22
TR150 2SA1392 (S, T)
D155
D156
D152
R162 180
R165 10K
D159 HZ16L-
C153 470/35
C152 470/63 (SME)
D160 HZ16L-
R168 10K
R169 22
TR152 2SC3383 (S, T)
R163 180
R167 82
D158
D157
D153
D154
F3 T630mA 250V
TR153 2SA1248 (S, T)
D151~154 : 1N4002

JS103
R220 330
R209
C204 1/50 (FA)
R244 220K
R245 220K
TR208
TR206
C203 27P
TR210 2SC3383 (S, T)
TR212 2SA1392 (S, T)
TR211 2SC3383 (S, T)
R243 470K
TR214 2SA1248 (S, T)
TR216
R223 1W 8.2
R224 2.2K
R227 1W 1
FR202 1K
R225 1W 270
FR201 1K
R230 5W 0.33+0.33
R222 1W 8.2
TR213 2SC3116 (S, T)
TR215
R226 1W 1
R242 470K
C205 0.047
C206 0.047
R231 2W 56
C215 15P
D206 1SS131
D207 1SS131
R238 150K
R239 150K
R240 47K
*R237
TR217 2SA970 (BL)
*R236

IC101 (2/2) M5218AL
-16.4V
-2.0V
R235 22K
R234 120K
R233 150K
C207 1/50
C208 2.2/50
D161
D162
D165
D166
R176 82
TR154 2SA1392 (S, T)
R175 2.7
C159 1000/16 (KME)
C160 100/10 (FA)
R182 2.7
TR155 2SC3116 (S, T)
TR158 2SC3116 (S, T)
D161~164 : 1N4002
D163
D164
D167 HZ6L-C2
R174 3.9K
T101
R178 10K
R177 22K
TR156 2SC3330 (S, T, U)
TR157 2SC3383 (S, T)

AM-39 E A1030S-EV
AM-39 B A1030S-BS
AM-49 E A1030S-EV
AM-49 B A1030S-BS

HOT (WHITE) W113
COLD (RED) W114
STANDBY
+5.6V
STANDBY
J106 SBRK3S-5
J105 SBRK3S-5
GND
+5.6V
GND
TO TONE PCB W105
PROTECT
POWER ON/OFF
GND
+5.6V
J104 SBRK4S-5
TO TONE PCB W104

WW113
WW114
W306

D301 1S2473
RL301 VS-6MB
*F1
W302 HOT (WHITE)
W303 COLD (RED)
C301 0.0047/400V
J302 M1882
AC OUTLET E ONLY

220V~230V/50Hz
240V/50Hz
B ONLY
P301 B2P-3-VH
2 HOT
1 COLD
L301 2.2
L302 2.2
E ONLY

PRIMARY PCB
A1030A501B

VOLTAGES WERE MEASURED
GNAL WAS BEING INPUT.
CD MODE, MODEL : AM-49)

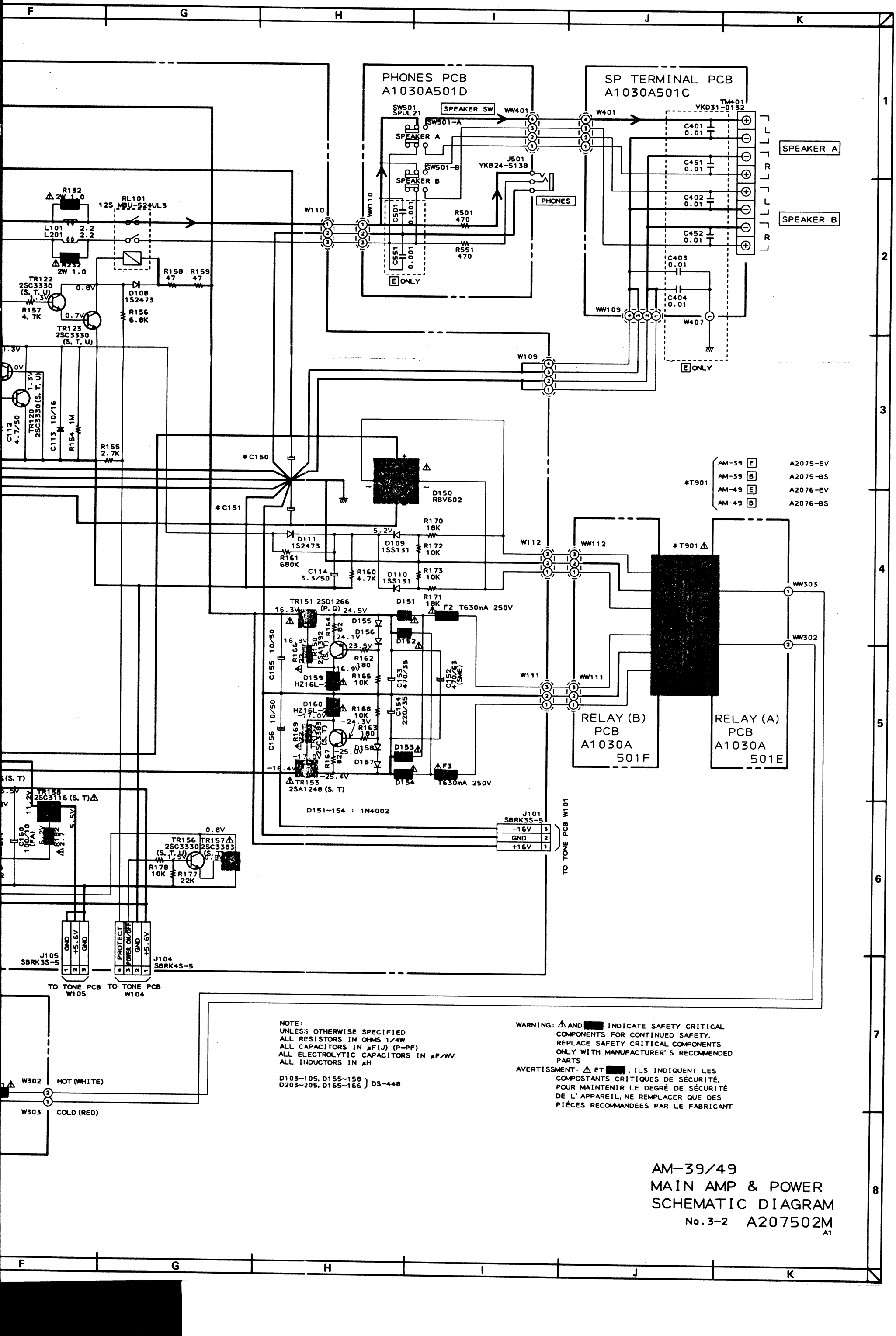
B (POWER SUPPLY) LINE

L-CH AUDIO SIGNAL LINE

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W
ALL CAPACITORS IN μF(J) (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL INDUCTORS IN μH

D103~105, D155~158) DS-448
D203~205, D165~166)

C D E F G H I



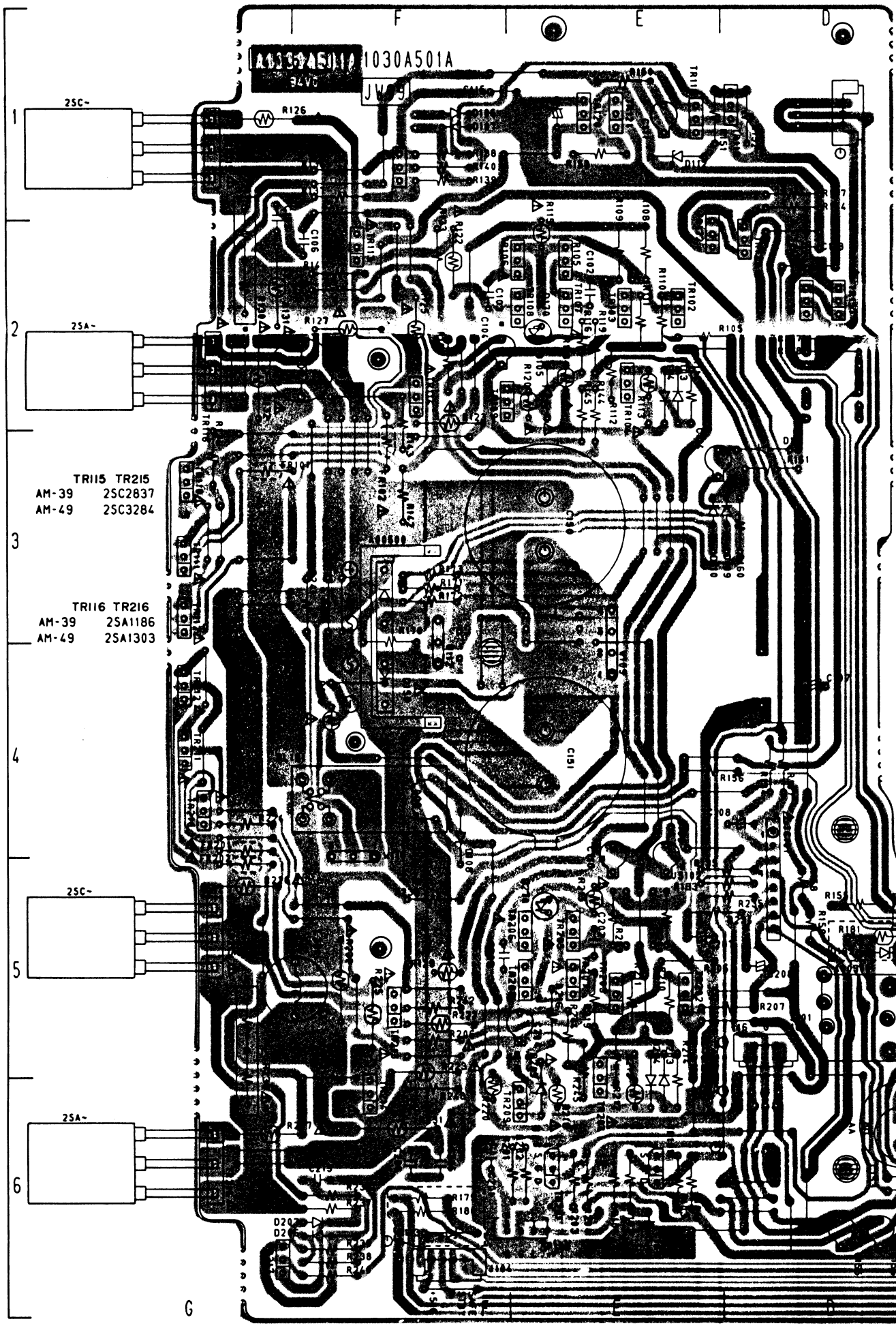
NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W
ALL CAPACITORS IN μF(J) (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL INDUCTORS IN μH

D103~105, D155~158) DS-448
D203~205, D165~166)

WARNING: ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ■, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

AM-39/49
MAIN AMP & POWER SCHEMATIC DIAGRAM
No.3-2 A207502M
A1



PRINCIPAL PARTS LOCATION

CONNECTORs

J101	D5
J104	F6
J105	A6
J106	D1

WIREs

W109	E3,4
W110	F4,5
W111	B5
W112	F3,4
W113	A5
W114	A5

FUSE RESISTORs

FR101	G3
FR102	F3
FR201	G4
FR202	G5

IC

IC101	D4,5

TRANSISTORs

TR101	E6
TR102	E2
TR103	E2
TR104	E2
TR105	E2
TR106	E2
TR107	E2
TR108	E2
TR109	E2
TR110	G3
TR111	G3
TR112	G3
TR113	F2
TR114	F2
TR115	G1
TR116	G2
TR117	F1
TR118	E1
TR119	D1
TR120	E1
TR121	E1
TR122	E2
TR123	D2
TR150	C,D5
TR151	D5
TR152	C6
TR153	C6
TR154	B6
TR155	B6
TR156	D2
TR157	D2
TR158	B6
TR201	E6
TR202	E5
TR203	E5
TR204	E5,6
TR205	E5
TR206	E5
TR207	E5
TR208	E5
TR209	E6
TR210	G4
TR211	G4
TR212	G4
TR213	F5
TR214	F6
TR215	G5
TR216	G6
TR217	G6

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

MAIN AMP PCB A1030A501A

NOTE : PARTS DIFFER DEPENDING O
REFER TO SCHEMATIC DIAGRA
PARTS INFORMATION.

PRINCIPAL PARTS LOCATION

CONNECTORs

J101	D5
J104	F6
J105	A6
J106	D1

WIREs

W109	E3,4
W110	F4,5
W111	B5
W112	F3,4
W113	A5
W114	A5

FUSE RESISTORs

FR101	G3
FR102	F3
FR201	G4
FR202	G5

IC

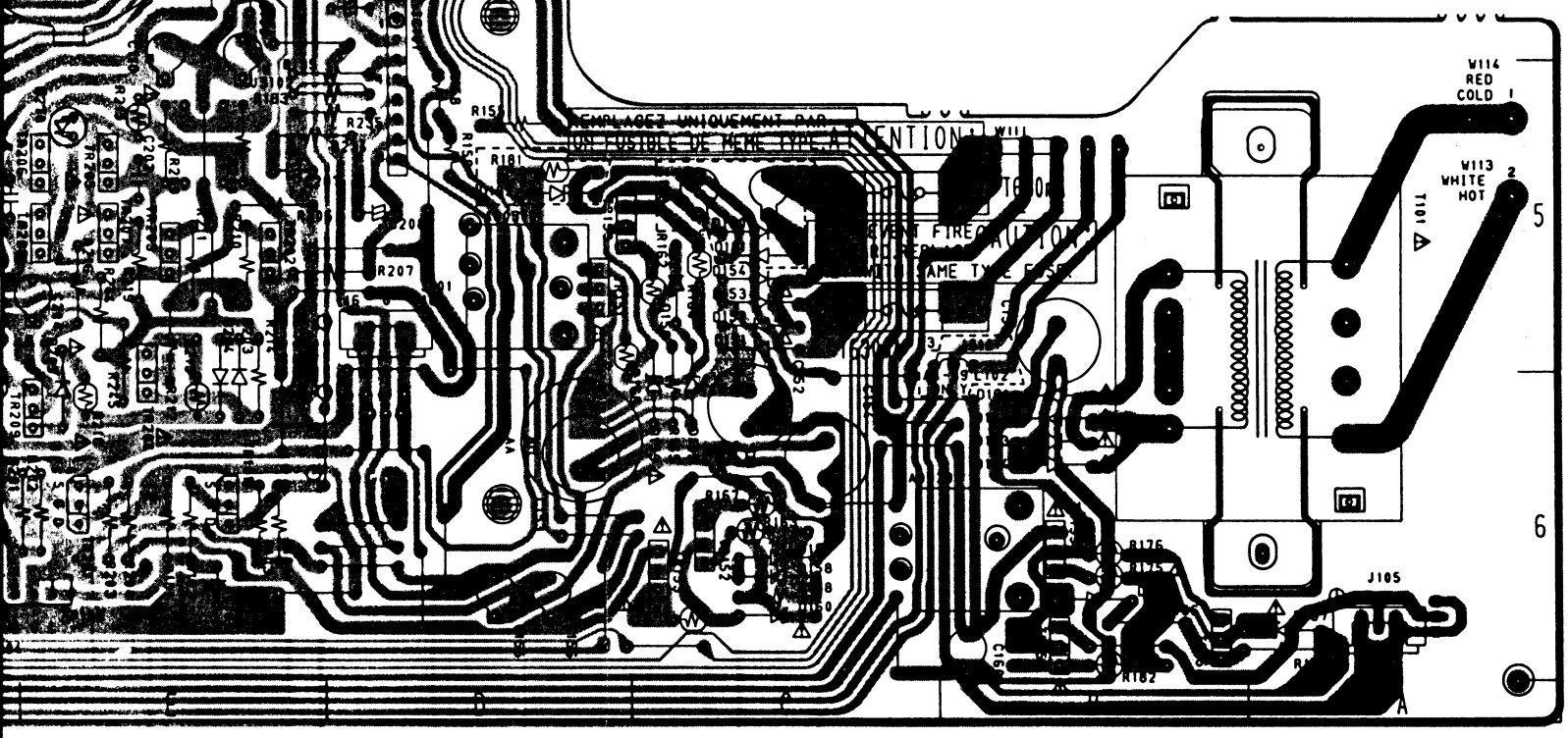
IC101	D4,5

TRANSISTORs

TR101	E6
TR102	E2
TR103	E2
TR104	E2
TR105	E2
TR106	E2
TR107	E2
TR108	E2
TR109	E2
TR110	G3
TR111	G3
TR112	G3
TR113	F2
TR114	F2
TR115	G1
TR116	G2
TR117	F1
TR118	E1
TR119	D1
TR120	E1
TR121	E1
TR122	E2
TR123	D2
TR150	C,D5
TR151	D5
TR152	C6
TR153	C6
TR154	B6
TR155	B6
TR156	D2
TR157	D2
TR158	B6
TR201	E6
TR202	E5
TR203	E5
TR204	E5,6
TR205	E5
TR206	E5
TR207	E5
TR208	E5
TR209	E6
TR210	G4
TR211	G4
TR212	G4
TR213	F5
TR214	F6
TR215	G5
TR216	G6
TR217	G6

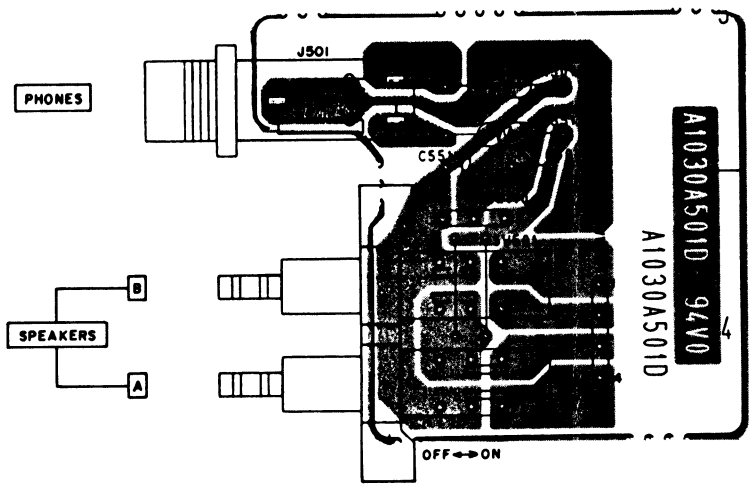
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

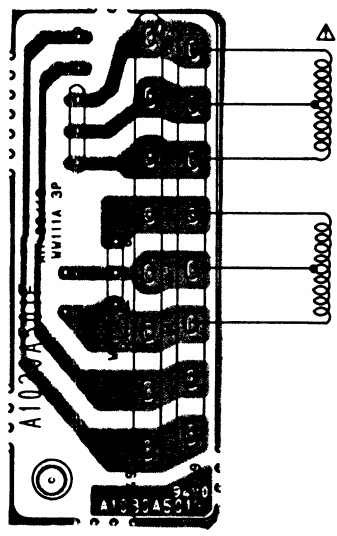


MAIN AMP PCB A1030A501A

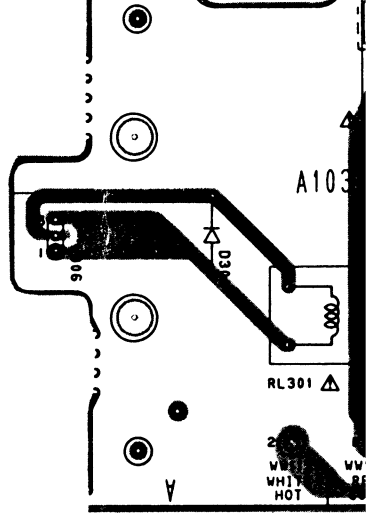
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT PARTS INFORMATION.



PHONES PCB A1030A501D



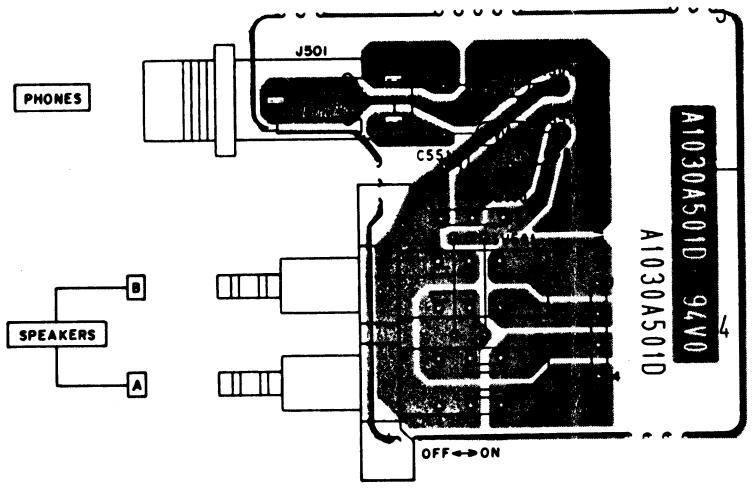
RELAY(B) PCB
A1030A501F



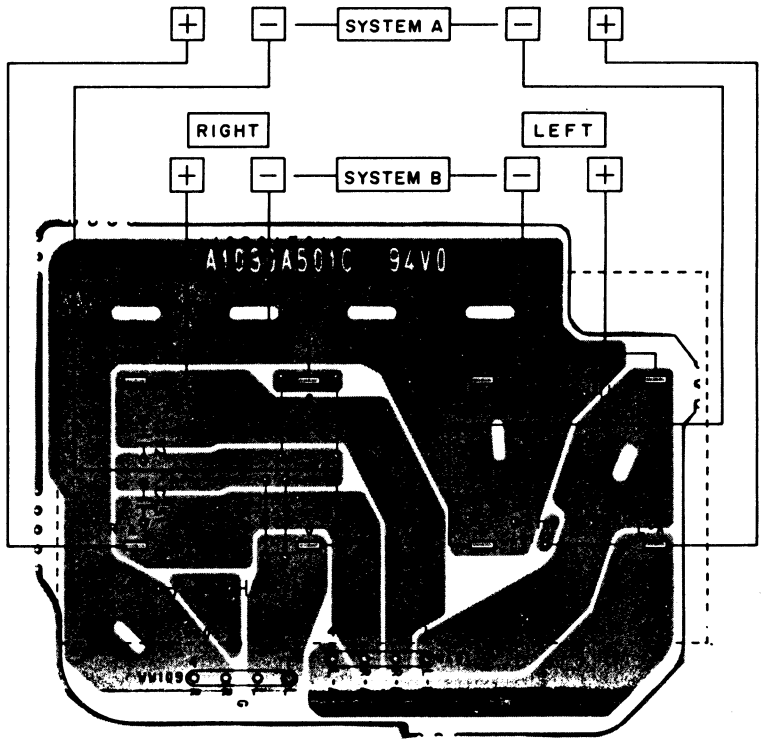
F2
G1
G2
F1
E1
D1
E1
E1
E2
D2
C,D5
D5
C6
C6
B6
B6
D2
D2
B6
E6
E5
E5
E5,6
E5
E5
E5
E5
E6
G4
G4
G4
F5
F6
G5
G6
G6

ENTS FOR CONTINUED SAFETY,
S ONLY WITH MANUFACTURER'S

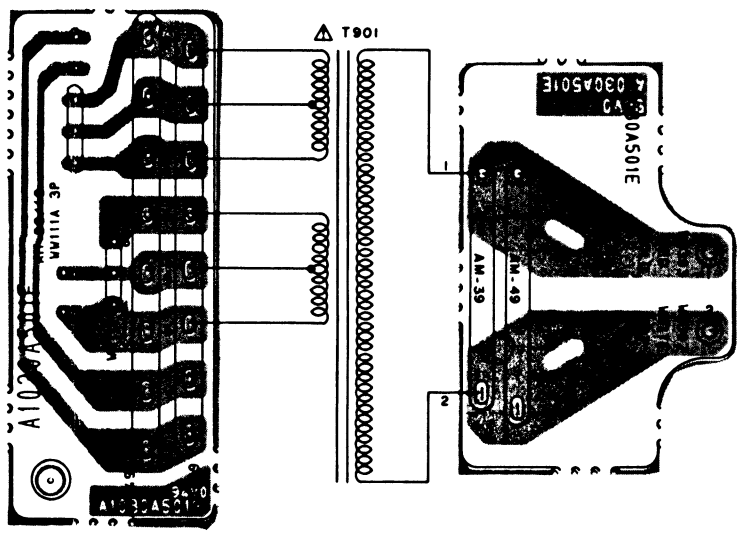
RITIQUES DE SÉCURITÉ.
E DE L'APPAREIL,
MANDEES PAR LE FABRICANT



PHONES PCB A1030A501D

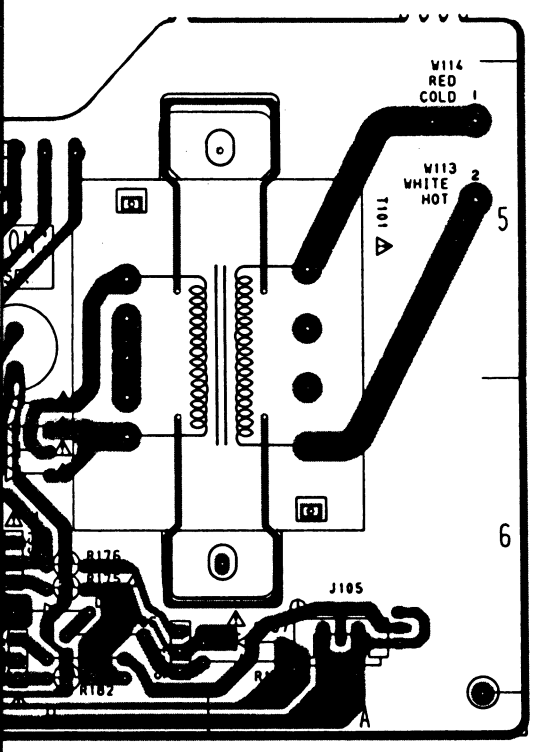


SP TERMINAL PCB A1030A501C

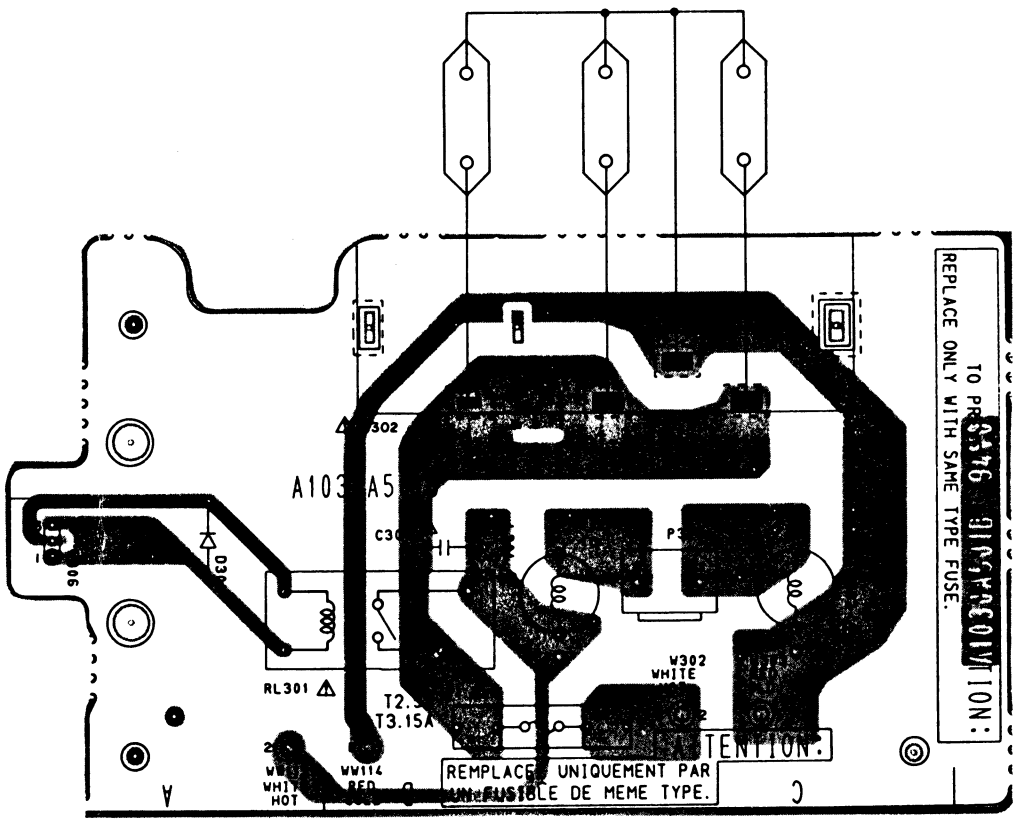


RELAY(B) PCB
A1030A501F

RELAY(A) PCB
A1030A501E

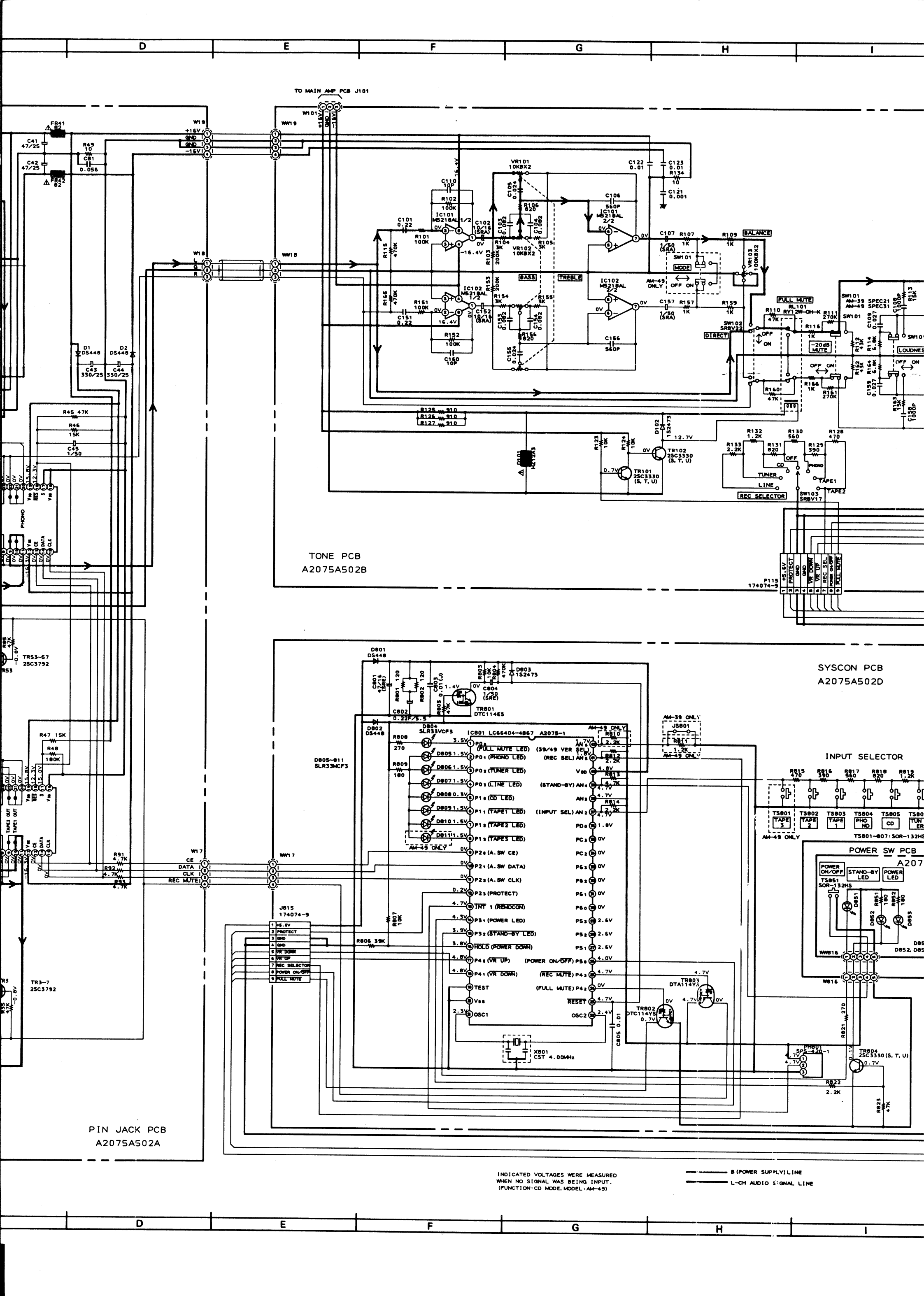


S DIFFER DEPENDING ON MODEL NUMBER.
R TO SCHEMATIC DIAGRAMS FOR PERTINENT
S INFORMATION.



PRIMARY PCB A1030A501B

TO MAIN AMP PCB J101
W101
+16V
GND
GND
-16V
W19
W18
W17
PHONO
CD
TUNER
LINE
TAPE1
TAPE2
TAPE3
IN
OUT
L
R
J1 T6227-AACB
J2 T6087
J3 T6027-AABB
J4 T6027-AABB
J5 T6027-AABB
E ONLY
J ONLY
JS3
JS4
L1, L51 ZJY51R5-2PB
IC1 1/2 M5218AP-721
IC1 2/2 M5218AP-721
IC2 LC7822N INPUT SELECTOR
IC3 LC7822N REC SELECTOR
TR1 2SK170 (BL)
TR2 2SK170 (BL)
TR51 2SK170 (BL)
TR52 2SK170 (BL)
TR53-57 2SC3792
TR3-7 2SC3792
SW1 SSSV04
D1 DS448
D2 DS448
FR41 82
FR42 82
CB1 0.056
C41 47/25
C42 47/25
C43 330/25
C44 330/25
C45 1/50
R45 47K
R46 15K
R47 15K
R48 180K
R49 10
IC101 M5218AL 1/2
IC102 M5218AL 1/2
TONE PCB
A2075A502B
PIN JACK PCB
A2075A502A
AM-49 ONLY
D801 DS448
D802 DS448
D804 SLR33VCF3
D805~811 SLR33MCF3
TR801 DTC114ES
IC801 LC66
J815 174074-9
+5.6V
PROTECT
GND
GND
VR DOWN
VR UP
REC SELECTOR
POWER ON/OFF
MUTE
CE
DATA
CLK
REC MUTE
TEST
Vss
OSC1
INT 1
AM-49 ONLY


TO MAIN AMP PCB J101
W101
W19
W18
W17
WW19
WW18
WW17
TONE PCB
A2075A502B
SYSCON PCB
A2075A502D
PIN JACK PCB
A2075A502A
POWER SW PCB
A207
INPUT SELECTOR
REC SELECTOR
IC101 M5218AL 1/2
IC101 M5218AL 2/2
IC102 M5218AL 1/2
IC102 M5218AL 2/2
IC801 LC66404-4867 A2075-1
VR101 10KBX2
VR102 10KBX2
VR103 100KBX2
SW101
SW102 SRBV22
SW103 SRBV17
RL101 RY12W-OH-K
TR101 2SC3330 (S, T, U)
TR102 2SC3330 (S, T, U)
TR801 DTC114ES
TR802 DTC114YS
TR803 DTA114YS
TR804 2SC3330 (S, T, U)
TR53-57 2SC3792
TR3-7 2SC3792
X801 CST 4.00MHz
PH801 SPS-420-1
JS801
JB15 174074-9
P115 174074-9
TS801 TAPE 3
TS802 TAPE 2
TS803 TAPE 1
TS804 PHONO
TS805 CD
TS806 TUNER
TS851 SOR-132HS
TS801-807: SOR-132HS
D101 HZ12A3
D102 1S2473
D801 DS448
D802 DS448
D803 1S2473
D804 SLR33VCF3
D805-811 SLR33MCF3
D851 D852 D853
BALANCE
BASS
TREBLE
MODE
FULL MUTE
-20dB MUTE
DIRECT
LOUDNESS
PHONO
TAPE1 OUT
TAPE2 OUT
AM-49 ONLY
AM-39 ONLY
(39/49 VER SEL)
(REC SEL)
(STAND-BY)
(INPUT SEL)
(POWER ON/OFF)
(REC MUTE)
(FULL MUTE)
(FULL MUTE LED)
(PHONO LED)
(TUNER LED)
(LINE LED)
(CD LED)
(TAPE1 LED)
(TAPE2 LED)
(TAPE3 LED)
(A.SW CE)
(A.SW DATA)
(A.SW CLK)
(PROTECT)
INT 1 (REMOCON)
(POWER LED)
(STAND-BY LED)
HOLD (POWER DOWN)
(VR UP)
(VR DOWN)
TEST
Vss
OSC1
OSC2
RESET
+16V
GND
-16V
+5.6V
PROTECT
VR DOWN
VR UP
REC SEL
POWER ON/OFF
FULL MUTE
CE
DATA
CLK
REC MUTE
STAND-BY LED
POWER LED
INDICATED VOLTAGES WERE MEASURED WHEN NO SIGNAL WAS BEING INPUT. (FUNCTION: CD MODE, MODEL: AM-49)
B (POWER SUPPLY) LINE
L-CH AUDIO SIGNAL LINE

WARNING: ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ■, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L' APPAREIL. NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W
ALL CAPACITORS IN μF (J) (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV

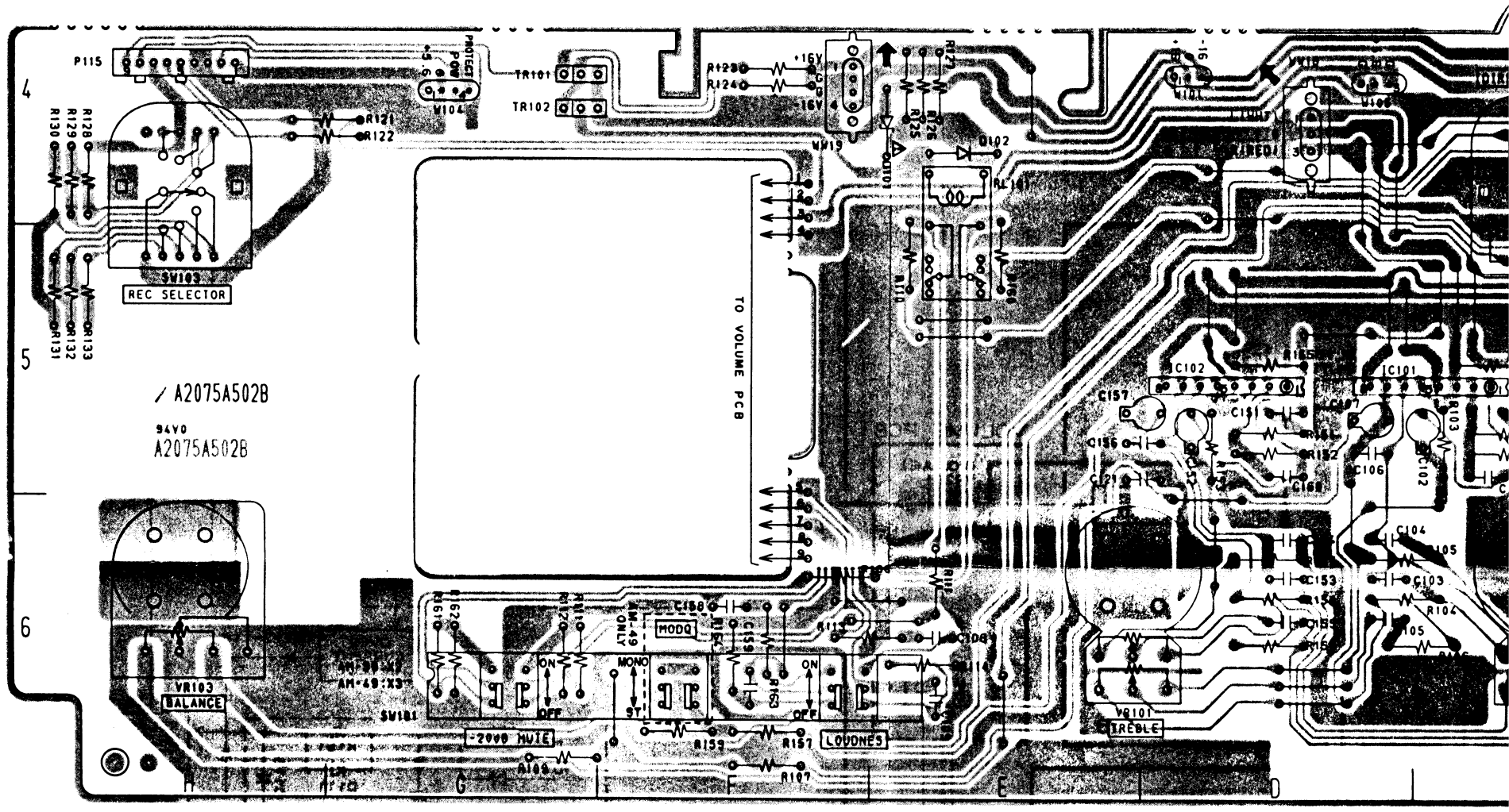
INDICATED VOLTAGES WERE MEASURED WHEN NO SIGNAL WAS BEING INPUT. (FUNCTION: CD MODE, MODEL: AM-49)

B (POWER SUPPLY) LINE

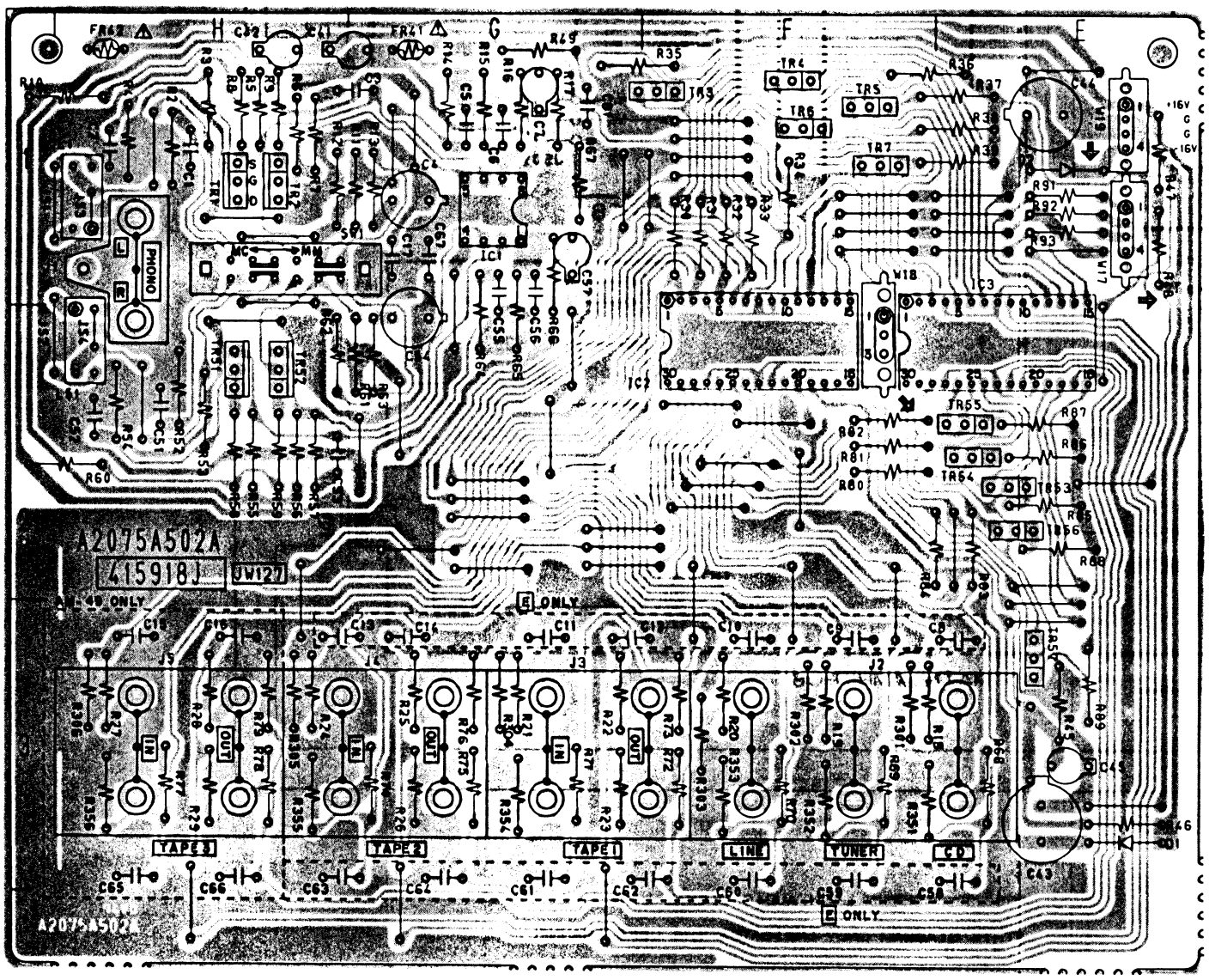
L-CH AUDIO SIGNAL LINE

AM-39/49 PRE AMP & SYSCON SCHEMATIC DIAGRAM

No. 3-3 A207503M
A0



TONE PCB A2075A502B



PIN JACK PCB A2075A502A

PRINCIPAL PARTS LOCATION

CONNECTORs

J1 ..... H1
J2 ..... E,F3
J3 ..... F,G3
J4 ..... G,H3
J5 ..... H3

WIREs

W17 ..... E1
W18 ..... F2
W19 ..... E1

FUSE RESISTORs

FR41 ..... G1
FR42 ..... H1

ICs

IC1 ..... G1
IC2 ..... F2
IC3 ..... E2

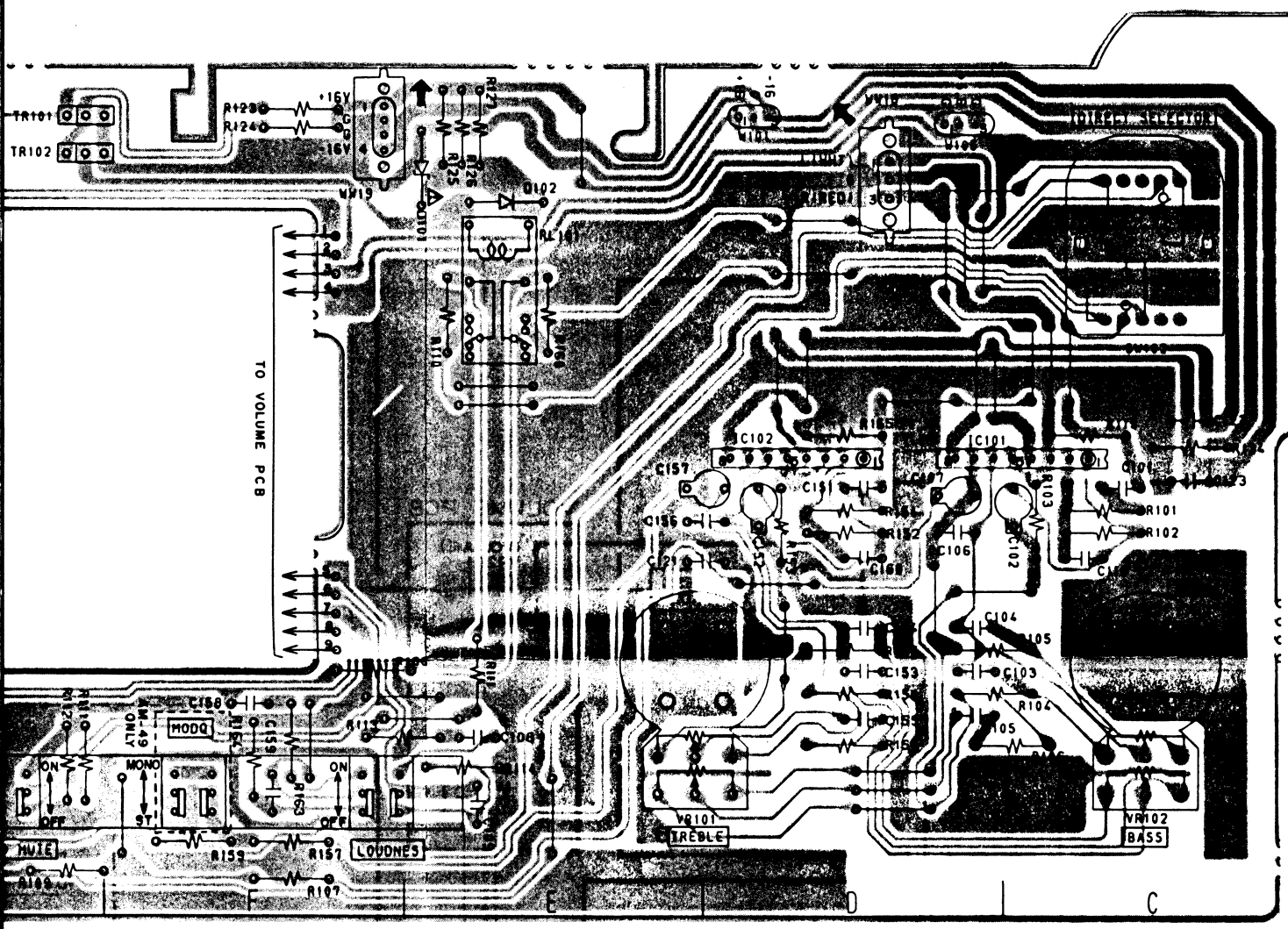
TRANSISTORs

TR1 ..... H1
TR2 ..... H1
TR3 ..... F,G1
TR4 ..... F1
TR5 ..... F1
TR6 ..... F1
TR7 ..... F1
TR51 ..... H2
TR52 ..... H2
TR53 ..... E2
TR54 ..... E2
TR55 ..... E2
TR56 ..... E2
TR57 ..... E3

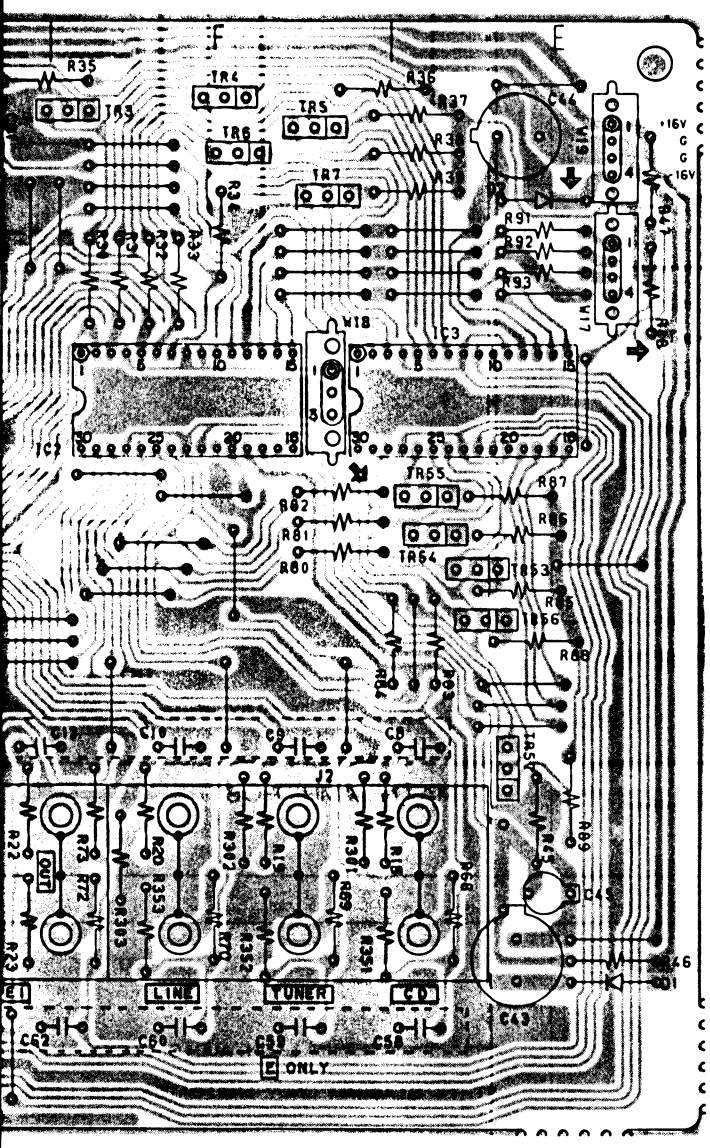
NOTE : PARTS DIFFER DEPENDING ON MODEL
REFER TO SCHEMATIC DIAGRAMS FOR P
PARTS INFORMATION.

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONT
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MA
RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉ
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL
NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR L



TONE PCB A2075A502B



CB A2075A502A

PRINCIPAL PARTS LOCATION

CONNECTORs

J1	H1
J2	E,F3
J3	F,G3
J4	G,H3
J5	H3

WIREs

W17	E1
W18	F2
W19	E1

FUSE RESISTORs

FR41	G1
FR42	H1

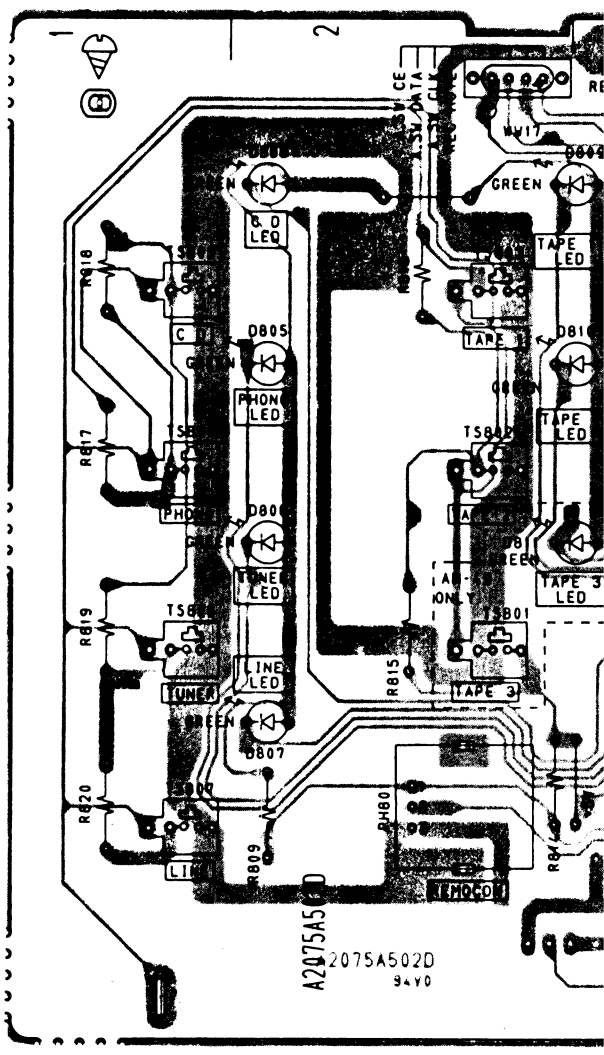
ICs

IC1	G1
IC2	F2
IC3	E2

TRANSISTORs

TR1	H1
TR2	H1
TR3	F,G1
TR4	F1
TR5	F1
TR6	F1
TR7	F1
TR51	H2
TR52	H2
TR53	E2
TR54	E2
TR55	E2
TR56	E2
TR57	E3

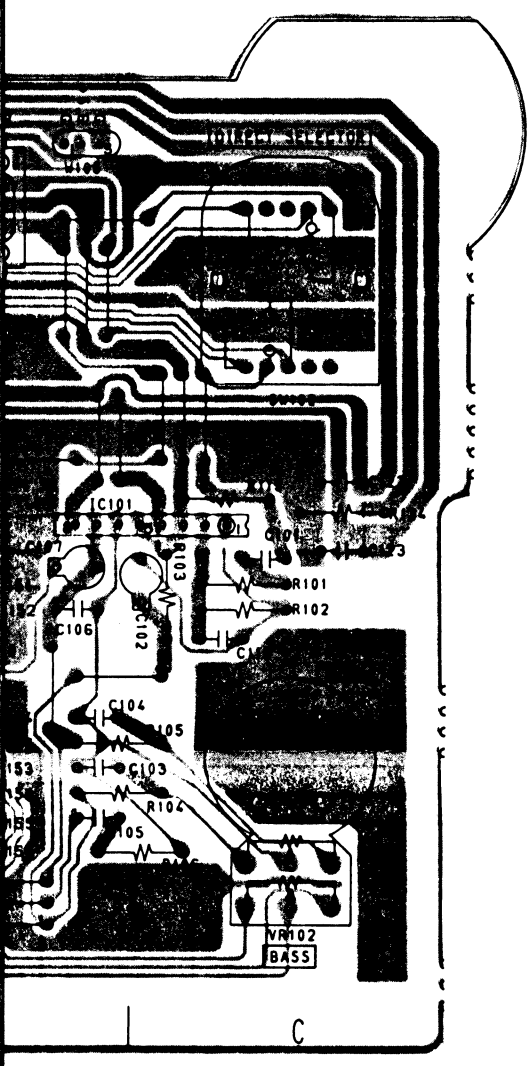
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT PARTS INFORMATION.

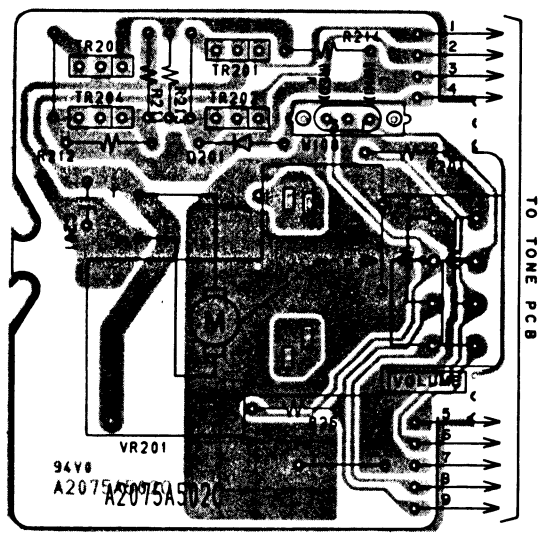


SYSCON PCB A207

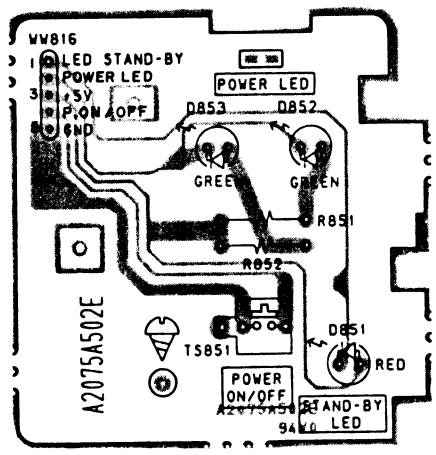
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT





VOLUME PCB A2075A502C



POWER SW PCB A2075A502E

S LOCATION

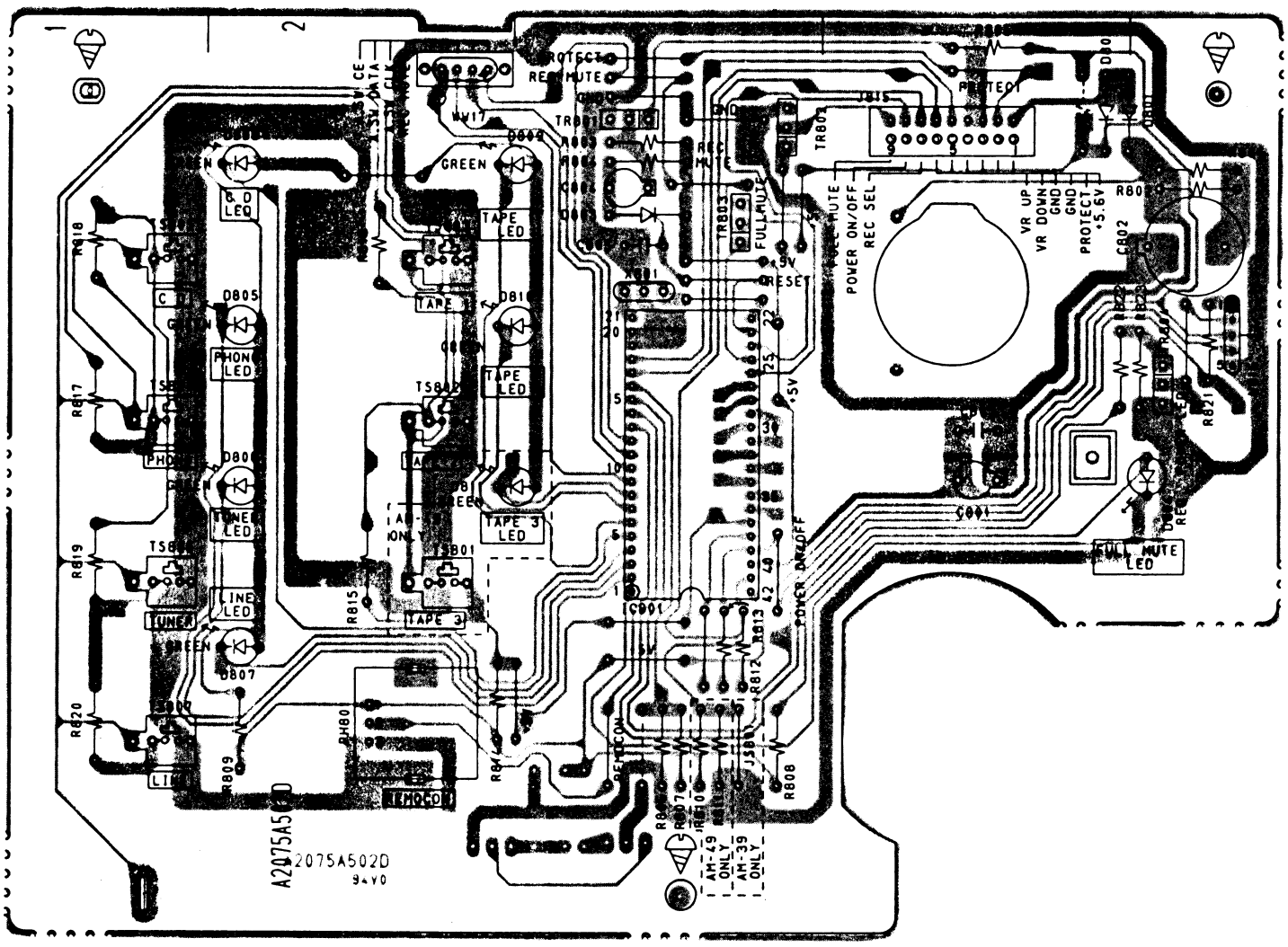
3
3
3

1

DEPENDING ON MODEL NUMBER.
MATIC DIAGRAMS FOR PERTINENT
TION.

TICAL COMPONENTS FOR CONTINUED SAFETY,
AL COMPONENTS ONLY WITH MANUFACTURER'S

COMPOSANTS CRITIQUES DE SÉCURITÉ.
RÉ DE SÉCURITÉ DE L'APPAREIL,
PIÈCES RECOMMANDEES PAR LE FABRICANT



SYSCON PCB A2075A502D

A/D CONVERTER INPUT VOLTAGE (APPROX.)

	LINE	TUNER	CD	OFF	PHONO	T
INPUT SELECT (IC801 ㊲ PIN)	3.4V	2.9V	2.4V		1.8V	1
REC OUT SELECT (IC801 ㊶ PIN)	3.4V	2.9V	2.4V	1.8V	1.3V	0

PHONO J1 TR1, 2 FET DIFFER. AMP IC1 M5218AP RIAA EQ AMP MM/MC SELECT SW1

INPUT J2 CD TUNER LINE TAPE1 J3 TAPE2 J4 TAPE3 J5 AM-49 ONLY

IC2 LC7822N (INPUT SELECTOR) CE DATA CLK

TR6 TR7 TR5 TR4 TR3

DIRECT SW102 ON OFF

IC101 (1/2) M5218AL AMP TONE CONT IC101 (2/2) NF AMP

VR101 TREBLE VR102 BASS AM-49 ONLY SW101a MODE VR103 BALANCE R-CH

RL101 (MUTE)

REC SELECTOR TAPE2 TAPE1 PHONO OFF CD TUNER LINE SW103

TR101, 102 RELAY DRIVE

IC801 LC66404A-4B67 (SYSCON MI-COM)

PH801 REMOTE SIGNAL DET REMOCON

REC SELECT 5V FULL MUTE

A/D CONV

CE DATA CLK REC MUTE TR803

RESET STAND-BY STAND-BY LED POWER LED FULL MUTE LED PHONO LED TUNER LED LINE LED CD LED TAPE1 LED TAPE2 LED TAPE3 LED

A/D CONV 39/49 SELECT VDD INPUT SELECT AM-39 ONLY

TR801 RESET PULSE TR804

POWER ON/OFF +5V

AM-49 ONLY TS801~807 (TS801 : AM-49 ONLY) INPUT SELECT SWITCHES

REC OUT TAPE1 J3 TAPE2 J4 TAPE3 J5 AM-49 ONLY

TAPE2 OUT TAPE1 OUT TAPE2 TAPE1 LINE TUNER CD PHONO CE DATA CLK

IC3 LC7822N (REC SELECTOR)

PIN JACK PCB

POWER SW PCB

SYSCON PCB

AC IN

C | D | E | F | G | H | I

A/D CONVERTER INPUT VOLTAGE (APPROX.)

	LINE	TUNER	CD	OFF	PHONO	TAPE1	TAPE2	TAPE3
INPUT SELECT (IC801 ㊲ PIN)	3.4V	2.9V	2.4V		1.8V	1.3V	0.8V	0V
REC OUT SELECT (IC801 ㊵ PIN)	3.4V	2.9V	2.4V	1.8V	1.3V	0.8V	0V	

IC2
LC7822N
(INPUT SELECTOR)

CE
DATA
CLK

DIRECT
SW102
ON
OFF

IC101 (1/2)
M5218AL
AMP
TONE CONT
IC101 (2/2)
NF AMP

VR101
TREBLE
VR102
BASS
AM-49 ONLY
SW101a
MODE
VR103
BALANCE
R-CH

RL101
(MUTE)
-20dB MUTE
SW101b
OFF
ON
SW101c
LOUDNESS CONTROL

VOLUME PCB
(VOLUME)
VR201

POWER AMP SECTION
TR101
BU
TR105~109
DIFF. AMP

REC SELECTOR
SW103
TAPE2
TAPE1
PHONO
OFF
CD
TUNER
LINE

TR101, 102
RELAY DRIVE

TR201~204
MOTOR DRIVE

TONE PCB

PH801
REMOTE SIGNAL DET
REMOCON

IC801 LC66404A-4B67
(SYSCON MI-COM)

REC SELECT
5V
TR802

A/D CONV

FULL MUTE
VR UP
VR DOWN
PROTECT (FROM RL101)
POWER ON/OFF
39/49 SELECT
VDD
+5V
INPUT SELECT

TR803
REC MUTE

RESET
STAND-BY
STAND-BY LED
POWER LED
FULL MUTE LED
PHONO LED
TUNER LED
LINE LED
CD LED
TAPE1 LED
TAPE2 LED
TAPE3 LED

TR801
RESET PULSE
TR804

AM-39 ONLY
AM-49 ONLY
C802
(BACK UP)

POWER ON/OFF
+5V
TS801~807
(TS801 : AM-49 ONLY)
INPUT SELECT SWITCHES

TR158
5V REG
TO VOLUME PCB
5V REG
TO SYSCON PCB
TR154, 155
RELAY DRIVE
TR156, 157
T101
SUB TRANS

PHONES
TO D109, 110
TO POWER AMP
+16V
+16V REG
TR150, 151
TR152, 153
-16V
-16V REG

POWER SW PCB
SYSCON PCB
MAIN AMP PCB
PRIMARY PCB
RL301
AC IN

L-CH AUDIO SIGNAL LI

*THIS DIAGRAM ONLY INDICATES THE LEF

C | D | E | F | G | H | I

OX.)						
NER	CD	OFF	PHONO	TAPE1	TAPE2	TAPE3
.9V	2.4V		1.8V	1.3V	0.8V	0V
.9V	2.4V	1.8V	1.3V	0.8V	0V	

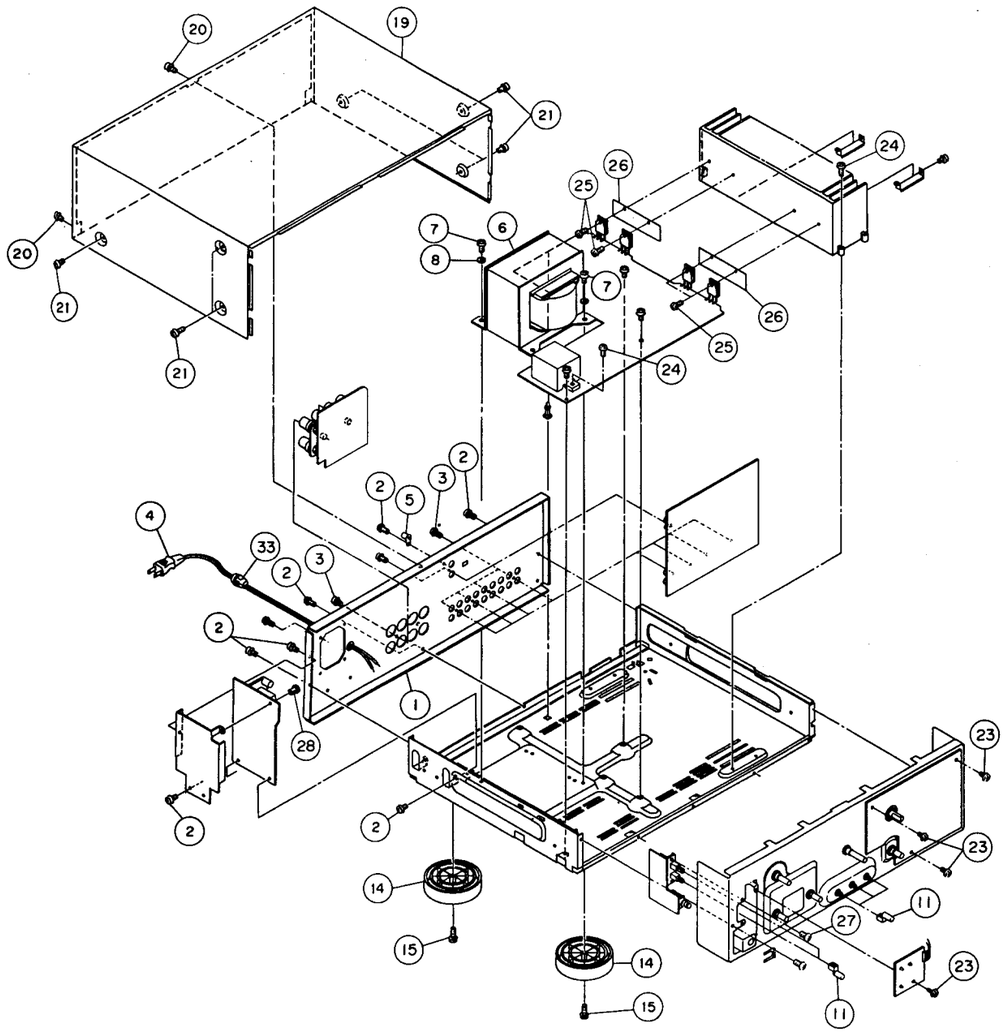
DIRECT
SW102
ON
OFF
RL101 (MUTE)
-20dB MUTE
SW101b
OFF
ON
SW101c
LOUDNESS CONTROL
VR103
BALANCE
VOLUME PCB
(VOLUME) VR201
TR101
BU
POWER AMP SECTION
IC101 M5218AL
DC POTENTIAL CONTROL
TR105~109
DIFF. AMP
TR110~112
BIAS CONT
TR113
PRE DRIVE
TR115
POWER DRIVE
TR114
PRE DRIVE
TR116
POWER DRIVE
PROTECTION RELAY
RL101
OVER CURRENT DETECT
TR117~119
TR122, 123
RELAY DRIVE
DC LEVEL DETECT
TR120, 121
D109
D110
R161
D111
C113
(POWER ON DELAY)
TR101, 102
RELAY DRIVE
TR201~204
MOTOR DRIVE
TONE PCB
REC SELECT
5V
TR802
A/D CONV
FULL MUTE
VR UP
VR DOWN
PROTECT (FROM RL101)
POWER ON/OFF
39/49 SELECT
VDD
+5V
INPUT SELECT
AM-39 ONLY
AM-49 ONLY
C802
(BACK UP)
SPEAKER A
SW501
OFF ↔ ON
SPEAKER B
TM401
SPEAKER A
SPEAKER B
SP TERMINAL PCB
R-CH
PHONES
J501
PHONES PCB
TR158
5V REG
TO VOLUME PCB
TO SYSCON PCB
TR154, 155
RELAY DRIVE
TR156, 157
T101 SUB TRANS
TO D109, 110
TO POWER AMP
D150
T901 MAIN TRANS
+16V
+16V REG
TR150, 151
TR152, 153
-16V
-16V REG
MAIN AMP PCB
RL301
AC IN
PRIMARY PCB

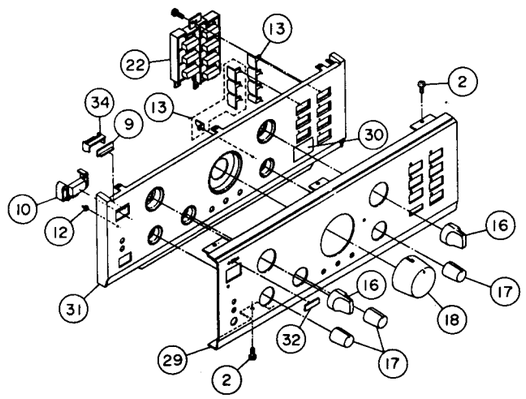
L-CH AUDIO SIGNAL LINE

*THIS DIAGRAM ONLY INDICATES THE LEFT CHANNEL.

AM-39/49
BLOCK DIAGRAM
No. A207551M
A1

FINAL ASSEMBLY BLOCK





12. FINAL ASSEMBLY BLOCK

Ref. No.	Part No.	Description
1-A	SP-415354M	PANEL REAR AM-39 (E) (SG)
1-B	SP-415358M	PANEL REAR AM-39 (B) (SG)
1-C	SP-415359M	PANEL REAR AM-49 (E) (SG)
1-D	SP-415362M	PANEL REAR AM-49 (B) (SG)
2	ZS-393644J	ST BID30X08STL BZN PROJECT
3	ZS-394412J	BT BID30X08STL BZN PROJECTION
4-A	*EW-408724M	AC CORD200 SE1H03VVH2F VHR3N E
4-B	*EW-415021M	AC CORD 200 SE-5VCTFK VHR3NB
5	EJ-329610	TERMINAL W/SCREW UB-0067 L 1P
6-A	*BT-415110M	TRANS POW A2075-EV [AM-39][T901]
6-B	*BT-415111M	TRANS POW A2075-BS [AM-39][T901]
6-C	*BT-415112M	TRANS POW A2076-EV [AM-49][T901]
6-D	*BT-415114M	TRANS POW A2076-BS [AM-49][T901]
7	ZS-346742	ST BID40X08STL CMT CUP
8	ZW-410640J	SW40STL CMT
9	SE-373237J1	LENS POW
10	SB-415182M	BUTTON POWER (SG)
11	SK-402898J	BUTTON PUSH-B
12	SE-410963M	LENS LED (SG)
13	SE-415346M	LENS SELECTOR (SG)
14	SA-379375	FOOT (N)
15	ZS-336714	ST BID30X12STL CMT
16	SK-415178M	KNOB SELECTOR (SG)
17	SK-415180M	KNOB TONE (SG)
18	SK-415349J	KNOB VOLUME PART
19	SP-391360J1	COVER UPPER B
20	ZS-393644J	ST BID30X08STL BZN PROJECT
21	ZS-404225J	ST BID40X08STL BZN
22	SB-415345J	BUTTON SELECTOR
23	ZS-394414J	BT BID30X08STL BZN
24	ZS-336714	ST BID30X12STL CMT
25	ZS-395789J	BT BID30X16STL BZN
26	EZ-401261J	INSULATOR TBM-F FB-20
27	ZS-358936	ST BID30X06STL CMT
28	ZW-698308	RV NYL30X055 BL
29-A	SP-415343J	PANEL FRONT AM-39
29-B	SP-415355J	PANEL FRONT AM-49
30	SE-415347M	FILTER REMOCON (SG)
31	SE-415344M	ESCUTCHEON FRONT (SG)
32	SM-365756C	NAME PLATE AKAI (2)
33	EZ-371605	BUSH CORD 2271
34	SE-373256	CASE LED

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

13. ACCESSARY

Ref. No.	Part No.	Description
1-A	AX-415040M	REMOCON RC-S49 [AM-39]
1-B	AX-415115M	REMOCON RC-S59 [AM-49]

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Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
AX415040M	13-1-A	ED511907	3-D162	ER411836J	3-R132	ET378524J	3-TR152
AX415115M	13-1-B	ED511907	3-D163	ER411836J	3-R232	ET378524J	3-TR157
BAA1030T020F	2-1-A	ED511907	3-D164	ES415046J	10-TS801	ET378524J	3-TR210
BAA1030T020G	2-1-B	ED624903	3-D108	ES415046J	10-TS802	ET378524J	3-TR211
BAA1030T020H	2-1-C	ED624903	3-D111	ES415046J	10-TS803	ET394735J	7-TR3
BAA1030T020J	2-1-D	ED624903	4-D301	ES415046J	10-TS804	ET394735J	7-TR4
BAA2075T030A	2-2-A	ED624903	8-D102	ES415046J	10-TS805	ET394735J	7-TR5
BAA2075T030B	2-2-B	ED624903	10-D803	ES415046J	10-TS806	ET394735J	7-TR6
BAA2075T030C	2-2-C	EF415060J	3-F2	ES415046J	10-TS807	ET394735J	7-TR7
BAA2075T030D	2-2-D	EF415060J	3-F3	ES415046J	11-TS851	ET394735J	7-TR53
BT415037M	3-T101-A	EF415061J	4-F1-A	ES415087J	6-SW501	ET394735J	7-TR54
BT415038M	3-T101-B	EF415062J	4-F1-B	ES415099J	8-SW102	ET394735J	7-TR55
BT415110M	12-6-A	EI382875J	10-X801	ES415119J	8-SW101-A	ET394735J	7-TR56
BT415111M	12-6-B	EI393323J	3-IC101	ES415120J	8-SW101-B	ET394735J	7-TR57
BT415112M	12-6-C	EI393323J	8-IC101	ES415123J	7-SW1	ET397160J	3-TR118
BT415114M	12-6-D	EI393323J	8-IC102	ES415126J	8-SW103	ET397160J	3-TR120
EC338496	4-C301	EI393326J	7-IC1	ET305463	3-TR105-A	ET397160J	3-TR121
EC364978	3-C159	EI403530J	7-IC2	ET305463	3-TR106-A	ET397160J	3-TR122
EC368118	10-C802	EI403530J	7-IC3	ET305463	3-TR107-A	ET397160J	3-TR123
EC373373	3-C150-B	EI416800J	10-IC801	ET305463	3-TR108-A	ET397160J	3-TR156
EC373373	3-C151-B	EJ329610	12-5	ET305463	3-TR117	ET397160J	8-TR101
EC390066J	3-C150-A	EJ342935	5-TM401	ET305463	3-TR205-A	ET397160J	8-TR102
EC390066J	3-C151-A	EJ368244	7-J2	ET305463	3-TR206-A	ET397160J	9-TR203
ED301911	3-D103	EJ382362J	7-J3	ET305463	3-TR207-A	ET397160J	9-TR204
ED301911	3-D104	EJ382362J	7-J4	ET305463	3-TR208-A	ET397160J	10-TR804
ED301911	3-D105	EJ382362J	7-J5	ET305463	3-TR217	ET403432J	10-PH801
ED301911	3-D155	EJ384270J	7-J1	ET307195	3-TR102	ET415051J	3-TR116-A
ED301911	3-D156	EJ391132J	6-J501	ET307195	3-TR103	ET415051J	3-TR216-A
ED301911	3-D157	EJ415050J	4-J302	ET307195	3-TR104	ET415052J	3-TR116-B
ED301911	3-D158	EO403613J	3-L101	ET307195	3-TR109-A	ET415052J	3-TR216-B
ED301911	3-D165	EO403613J	3-L201	ET307195	3-TR202	ET415053J	3-TR115-A
ED301911	3-D166	EO403613J	4-L301	ET307195	3-TR203	ET415053J	3-TR215-A
ED301911	3-D203	EO403613J	4-L302	ET307195	3-TR204	ET415056J	3-TR115-B
ED301911	3-D204	EQ400957J	8-RL101	ET307195	3-TR209-A	ET415056J	3-TR215-B
ED301911	3-D205	EQ403529J1	3-RL101	ET322353	3-TR101	EV401270J	8-VR101
ED301911	7-D1	EQ415055J	4-RL301	ET322353	3-TR201	EV401270J	8-VR102
ED301911	7-D2	ER324480	3-R128	ET345625	3-TR113	EV403534J	8-VR103
ED301911	9-D201	ER324480	3-R129	ET345625	3-TR155	EV415032M	9-VR201
ED301911	10-D801	ER328069	3-R175	ET345625	3-TR158	EW408724M	12-4-A
ED301911	10-D802	ER328069	3-R182	ET345625	3-TR213	EW415021M	12-4-B
ED307572	3-D106	ER333108	6-R501	ET345626	3-TR114	EZ371605	12-33
ED307572	3-D107	ER333108	6-R551	ET345626	3-TR153	EZ401261J	12-26
ED307572	3-D109	ER333119	3-R131	ET345626	3-TR214	SA379375	12-14
ED307572	3-D110	ER333119	3-R231	ET352726	3-TR112	SB415182M	12-10
ED307572	3-D206	ER341493	3-FR101	ET352726	3-TR150	SB415345J	12-22
ED307572	3-D207	ER341493	3-FR102	ET352726	3-TR154	SE373237J1	12-9
ED319176	8-D101	ER341493	3-FR201	ET352726	3-TR212	SE373256	12-34
ED330219	3-D112	ER341493	3-FR202	ET353897	10-TR801	SE410963M	12-12
ED343421	3-D159	ER344161	7-FR41	ET353899	3-TR119	SE415344M	12-31
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ED346529	3-D167	ER368226	3-R130	ET353899	9-TR202	SE415347M	12-30
ED383034J	3-D170	ER368226	3-R230	ET354365	10-TR802	SK402898J	12-11
ED383034J	3-D270	ER368284	3-R125	ET360749	7-TR1	SK415178M	12-16
ED384278J	3-D150	ER368284	3-R225	ET360749	7-TR2	SK415180M	12-17
ED400680J	10-D805	ER378514J	3-R122	ET360749	7-TR51	SK415349J	12-18
ED400680J	10-D806	ER378514J	3-R123	ET360749	7-TR52	SM365756C	12-32
ED400680J	10-D807	ER378514J	3-R222	ET368047	3-TR109-B	SP391360J1	12-19
ED400680J	10-D808	ER378514J	3-R223	ET368047	3-TR209-B	SP415343J	12-29-A
ED400680J	10-D809	ER378833J	3-R166	ET368048	3-TR105-B	SP415354M	12-1-A
ED400680J	10-D810	ER378833J	3-R169	ET368048	3-TR106-B	SP415355J	12-29-B
ED400680J	10-D811	ER382613J	3-R115	ET368048	3-TR107-B	SP415358M	12-1-B
ED403436J	10-D804	ER382613J	3-R118	ET368048	3-TR108-B	SP415359M	12-1-C
ED403987J	11-D852	ER382613J	3-R120	ET368048	3-TR205-B	SP415362M	12-1-D
ED403987J	11-D853	ER382613J	3-R215	ET368048	3-TR206-B	ZS336714	12-15
ED415085J	11-D851	ER382613J	3-R218	ET368048	3-TR207-B	ZS336714	12-24
ED511907	3-D151	ER382613J	3-R220	ET368048	3-TR208-B	ZS346742	12-7
ED511907	3-D152	ER383007J	3-R126	ET369248	10-TR803	ZS358936	12-27
ED511907	3-D153	ER383007J	3-R127	ET376880	3-TR151	ZS393644J	12-2
ED511907	3-D154	ER383007J	3-R226	ET378524J	3-TR110	ZS393644J	12-20
ED511907	3-D161	ER383007J	3-R227	ET378524J	3-TR111	ZS394412J	12-3

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
ZS394414J	12-23						
ZS395789J	12-25						
ZS404225J	12-21						
ZW410640J	12-8						
ZW698308	12-28						

ABBREVIATIONS (AMPLIFIER)

ABBREVIATION	EXPLANATION
A	Analog
AC	Alternating Current
AMP	AMPlifier
CD	Compact Disc
COM	COMmon
D	Digital
D/A	Digital to Analog
DAC	Digital to Analog Converter
DAT	Digital Audio Tape recorder
DC	Direct Current
GND	GrouND
L	Left
LED	Light Emitting Diode
MC	Moving Coil
MM	Moving Magnet
PCB	Printed Circuit Board
R	Right
REG	REGulator
REC	RECord
TR	TRansistor
SW	SWitch
V.AMP	Voltage AMPlifier
V.DISC	Video DISC
VR	Variable Resistance
VTR	Video Tape Recorder